Naoroji Godrej Centre For Plant Research , Shirwal

PROJECT REPORT

On

'COMMUNICATION, EDUCATION & PUBLIC AWARENESS FOR CLIMATE ACTION AND BIODIVERSITY CONSERVATION'

2023-2024

Sponsored by

Forest Development Corporation of Maharashtra (Nagpur)

Naoroji Godrej Centre For Plant Research , Shirwal

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Our Team Members

Dr. Kranti Yardi *(Senior Scientist and Administrator, NGCPR)*

Dr. Sagar Datir *(Associate Scientist, NGCPR)*

Mr. Shriniwas Nadgouda *(Accounts)*

Mr. Raviraj Rainak *(Project officer)*

Mr. Rohit Kumbhar *(Project officer)*

Miss. Radhika Jagtap *(Project officer)*

Mr. Pavan Kumatkar *(Research Assistant)*

Mr. Ajay Gangurde *(Research Assistant)*

Mr. Amol Pisal *(Field Assistant)*

Special Thanks

Mr. Vikas Gupta
(IFS And Director of FDCM)

Mr. Ravindra Wankhede
(Rtd.IFS)

Special Advisory

Dr. Erach Bharucha
(Director of BVIEER)

NAOROJI GODREJ CENTRE
FOR PLANT RESEARCH

Forest Development
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Acknowledgement

The NGCPR team acknowledges the financial support and cooperation provided by Forest Development Corporation of Maharashtra (FDCM), Nagpur in implementing this education program on sustainability in the Khandala region and surrounding area. This has helped in giving us the wonderful opportunity of working with remote and the most aspiring group of school students, college youth as well as communities in the rural and urban areas like Shirwal, Khandala, Satara, Bhor, Raireshwar (Pune district), Vita, Alsand, Kadegoan, and Kundal Sangli (Sangli district) in the Maharashtra. This reach would not have been possible without the financial support provided by FCM, Nagpur. Our sincere thanks to Shri. Vikas Gupta, IFS (Director of FDCM), who has been extremely supportive of the program. His deep interest and commitment have enabled us to bring in new innovative initiatives to the program. Also, he has enriched the program through their constant interactions with us over the entire year.

While it is essential to sensitize and empower the communities that are custodians of the rich biological heritage of the of the Western Ghats, the traditional knowledge that exists in the community must be communicated to the young generation, who are the future citizens of the area. Through various projects we were able to achieve this and create sensitivity in school students and college youth to a certain extent. We extend our gratitude to Mrs. Smita Crishna-Godrej (Director of NGCPR) for her constant support. We also express our sincere thanks to Dr. Erach. Bharucha (Director of Bharati Vidyapeeth Institute of Environment Education and Research, Pune) for his continuous guidance and innovative advice throughout the programme. His presence during workshops for students, teachers, farmers, and our team generated new ideas and activities relevant for the programme. We are all the time grateful to Authorities of Lawkim Motors Ltd for all the support extended in each and every programme on the campus. I am very thankful to Shrinivas Nadgouda who guided in the financial matters and audits of the project.

We also owe our deep acknowledgement to Dr. Sagar Datir (Senior Scientist at NGCPR) for his valued support and encouragement. The program has widened the horizons of the students, helping them appreciate the natural wealth in their own surroundings. We are thankful to Headmasters and teachers of schools, for their cooperation, and deep interest in the program. Acknowledgement cannot complete without thanking the students and different community groups who participated and made the project successful. I thank my team valued support staff three, Project Officers Rohit Kumbhar, Raviraj Rainak, Radhika Jagtap, for their positive engagement during the project. The credit of success of the project is their hard work during the period. I extend my sincere thanks to other NGCPR team members Amol Pisal and team at Ajnuj and Pawan Kumatkar and Ajay Gangurde (Research Assistants) who have extended help as and when required during this whole year. Thanks to administrative staff Sukeshini Shinde for her support.

Dr. Kranti Yardi

NGCPR

Executive Summary of the Project 2023-24

The local response to the project 'Communication Education and Public Awareness for Climate Action and Biodiversity conservation' funded by FDCM has shown a great degree of interest from different stakeholders both rural, semi urban and urban sectors of society. The project funding helped to reach to remote areas of the region and engage different stakeholders in various different activities.

- There were 9 different stakeholders including school students from rural and urban schools, college students from rural and cities like Pune, Satara and Sangli. Nature lover groups from Pune, university professors, college faculty from urban, local farmers, youth and women groups were involved in various different programmes.
- Through the programme NGCPR staff were able to reach around 6000 people through various activities and training sessions and action projects.
- More than 800 trees and shrubs were planted in schools, colleges and community areas and are looked after with more than 80% survival.
- Medicinal plants gardens were developed in two schools.
- Similarly, Constellation gardens or Nakshtra Van two were designed and implemented in school and college campus.
- School projects were initiated and more than 200 students participated and presented their projects. These projects generated indigenous knowledge of medicinal plants, local vegetables and their recipes, local veterinary plant medicines practiced by people, butterfly host plants and their lifecycles etc. This was all documented by local students.
- College youth worked on local problems related to climate changes in the surrounding. Interesting facts on millets and wild life issues were brought out by the students.
- Honey bee keeping training programme helped in educating the farmers regarding the role of honey bees in increasing the yield of crops.
- Various entrepreneurship training programmes were conducted for different stakeholders like gardening using local indigenous flora, art and craft using bamboo to create usable artifacts; growing bonsai; attracted the attention of young rural ladies who wish to learn and participate in such activities when farm work is limited. Several were rural college going youth who wished to carry out technologically suitable nature-based work as a part of their daily lives.
- There has been an interest in the use of local saplings for urban gardeners and appreciation of the need for establishing nurseries and landscaping from seedlings produced at NGCPR's Seed Bank of indigenous flora.
- The schools have set up a greening campaign using saplings provided by the NGCPR of local endemic species and are looking after them with a new sense of pride.

- Discussions with various stakeholders on the need for afforesting landscapes and maintaining natural grasslands through better species mix as biodiversity enhancement has led to an awareness of these projects such as watershed development using local species. The hydrological benefits and the potential of ecotourism that has been developed as a model on NGCPR's agricultural land.
- NGCPR experiments with growing small indigenous millets, tubers and wild relatives of vegetables known through their own traditional knowledge systems has triggered a new interest that should be expanded as a part of better nutrition and support for biodiversity.
- Nature trails in woodland, grassland, thorn forest and wetland at Ajnuj were used to create awareness of goods and services of ecosystems at school/ college level students.
- Ecofriendly rakhis were created by students and were used by students during Rakhi Poornima.
- Rural urban participation of youth at undergraduate college level in the activities of NGCPR as multiplier stakeholders' approach towards biodiversity conservation, climate action and sustainable livelihoods.
- Integrating on site visits to schools and colleges to support NGCPR program related to climate change and sustainable development as a part of Higher Education.
- The company workers were educated on the health and nutrition and role of millets in diet. An exhibition of millet s and millet products was set up for the employees in the campus.

  Overall, the financial support helped in extending awareness activity to various stakeholders on different subjects like plant conservation, nature protection, sustainable living action and climate actions for environment in different communities of the area.

List of All Programs

Year	Description
11th April 2023	Teacher training workshop no 1
11th May 2023	Visit by RR College, Bhor
22nd May 2023	World Biodiversity Day Awareness
5th June 2023	World Environment Day Awareness
19th June 2023	Indigenous Varieties of crops seeds & conservation
11th July & 12th July	Teacher Training Workshop 2
19th July 2023	Plantation- Kanheri School
25th July 2023	Plantation- Bholi School
25th July 2023	Plantation- Bhadawade School
1st August 2023	Plantation- Raireshwar School
2nd August 2023	Plantation- Sharda School Bhor
8th August 2023	Bonsai Training Workshop
15th August 2023	Seed Collection Drive - Winner
23rd August 2023	Fergusson College Field Visit to Ajnuj
28th August 2023	Bamboo Rakhi Training Workshop
11th Sep 2023	Ecofriendly Ganesha decoration Lecture at Kanheri, Lohamjawale & Atit Schools
12th Sep 2023	Ecofriendly Ganesha decoration Lecture at Sharda Schools
13th Sep 2023	Ecofriendly Ganesha decoration Lecture at Naigaon, Karnawadi Schools
15th Sep 2023	Plantation- Lohamjawale School
3rd October 2023	Ran Bhajya Mohatsav
9th October 2023	Lecture on Climate Change and Plantation (DPS)
11th October 2023	Visit to Brahmdeo Pottery Centre - Workshop
14th October 2023	Recharkha_ Workshop
19th October 2023	Plantation- Srinath Vidyamandir Alsand
20th October 2023	Lecture on Scope of Botany in Industrial Sector
4th November 2023	Godrej Communication Team Photography Event
25th November 2023	Pune Horticulture Event Visit
6th December 2023	Teacher Training Workshop 3
6th December 2023	Projects on Assessment of wild tubers, wild vegetables, veternary medicine, NTFP (Schools- 08)
7th December 2023	Workshop by BVIEER
11th December 2023	Honeybee Keeping Workshop Training
21st December 2023	Mame Bonsai Training Workshop
22nd December 2023	Lecture & School Visit at Kadegaon, Vita & Alsand
23rd December 2023	Lecture on Biodiversity and Grassland Ecosystem
7 & 8 January 2024	Anandmela at Godrej vikhroli
21 January 2024	Interaction with nature enthusiast
14 February 2024	Poster presentation competition
26 February 2024	Drawing Competition
6 March 2024	Climate change PPT competition
2 March 2024	Prize distribution

Number of Societal Outreach

Sr. no	Item	Total Count
1	No. of individuals outreached	2890
2	Medicinal Garden Developed	02
3	Nakshatravan Garden Developed	02
4	No. of trees	555
5	No. of Training programs	03
6	No. of Entrepreneurial training programs	06
7	No. of lectures conducted	14
8	No. of Schools involved	24
9	No. of Colleges involved	15
10	No. of Schools students involved	2350
11	No. of College students involved	555
12	No. of Farmers involved	195
13	No. of Teachers involved	60
14	Revenue generated	6700
	Total Outreach Count	**6050**

List of schools identified in the Khandala and Bhor (Rural) region

Sr no	Name of schools	Place	Std
1	Z.P Primary school Ajnuj	Ajnuj	5th to 7th
2	Rameshwar Vidyalaya Wing	Wing	8th to 10th
3	Z.P Primary school	Shindewadi	1st to 7th
4	Dnyansavardhani High school	Shirwal	1st to 7th
5	New English School Bholi	Bholi	5th to 10th
6	Rajendra vidyalaya Khandala	Khandala	5th to 12th
7	Shree Samarth Vidyamandir ,	Kanheri	5th to 7th
8	Z.P Primary school	Karnawadi	5th to 7th
9	Panchkroshi madhyamic Vidyalaya	Loham - Jawale	5th to 10th
10	K.S.P Vidyalya Naigoan	Naigaon	5 to 10
11	New English school Palashi	Palashi	5 to 10
12	Z.P Primary school Korle	korle	5th to 7th
13	Sau. Sushilatai Paranjpe Vidyalaya, Atit	Atit	5th to 10th
14	Raireshwar madhyamic vidyalya Titeghar	Titheghar	5 to 10
15	Bapuji salunkhe Vidhalaya	Asawali	5 to 10
16	Jijamata Marathi medium school &Jr collge Bhor	Bhor	5th to 10th
17	Jijamata English medium school &Jr collge Bhor	Bhor	5th to 10th
18	Raja Raghunathrao Vidhyalaya Bhor	Bhor	5 th to 12th
19	Z.P. primary school	Bholawade	1 th to 7th
20	Z.P School Pisavare	Pisavare	5th to 10th
22	Vasantrao pawar-patil Vidyalaya Bhadawde	Bhadawde	5th to 10th
23	Rayat English Medium School	Shirwal	1st to 10th

Urban school

24	Delhi Public School, Pune	Pune	1st to 10th

List of colleges identified for the project

Sr No	Name of college	Place	Details
1	Jijamata English medium Jr college Bhor	Bhor	Jr college
2	Shri Chhatrapati Shivaji Vidyalaya & Jr. College	Bhor	Jr. College
3	Shankarao Bhelke college	Nasrapur	Undergraduate
4	Anatrao Thopte college	Bhor	Undergraduate
5	Shilpatroa Kadam Mahavidyalaya	Shirwal	Undergraduate
6	Rajendra Vidyalaya	Khandala	Jr. College
7	Shri. Shivaji Vidyalaya	Nasrapur	undergraduate
8	Y.C. College	Satara	Post Graduation
9	L.B.S. College	Satara	Undergraduate
10	R.R College	Jat	Undergraduate
11	Miraj Mahavidyalaya	Miraj	Undergraduate
12	Balvant College	Vita	Undergraduate
13	Matoshree Bayabai Shreepatrao Kadam Kanya Mahavidyalaya	Kadegaon	Undergraduate
14	Rameshwar Mahavidyalaya wing	Wing	Jr.College
15	Aadarsh vidyalaya	Shirwal	Jr. College

International Biodiversity Day

Date: 22nd May 2023

Schedule for the Event

Time	Activity
9:30am- 10:30am:	Registration and Tea
10:30am- 11:30am	Inauguration, Introduction and felicitation ceremony
11:30am- 12:00pm	Prize distribution
12:00pm to 1:30pm	Lab and Nursery Visit
1:30pm to 2:00pm	Lunch

Report of the program

Radhika Jagtap, Program Officer started at 10:30 am by welcoming all the participants and chief guest. Radhika gave the brief about the importance of 'International Biodiversity Day'. Dr. Kranti Yardi introduced the honorable chief guest and felicitated Vikas Gupta Sir.

Session then continued with the most important fraction of program that is thoughts and insights of all the guests.

Mr. Sandeep Deo, HR Head, Godrej Lawkim Motors introduced all the audience with the manufacturing unit that Godrej has and how sustainable process they serve in manufacturing a product without harming environment. He also mentioned about the platinum rating that Godrej has for its sustainable process as a green building infrastructure.

Dr. Sagar Datir, gave a brief about NGCPR, its objectives, mission, vision, achievements etc. He highlighted the importance of conservation of endemic, rare, endangered, and threatened plant species, seed germplasm collection and plantation for conservation of plants.

Dr. Erach Bharucha gave analysis of the photographic competitions that were held as he judged the pictures and posters for the competitions. He addressed the students with improvements and appreciated them for their efforts. He encouraged students and communicated various tips for capturing good pictures. Key points that he addressed were about the object of which you take a photograph. He asked few questions about their photograph and if they can identify it. He stressed upon exotics and native species that are found here and their importance for conservation.

Next speaker was Dagma Fernandes, DGM & Executive Secretary at Godrej Lawkim Motors also mentioned about importance of native species and their conservation.

Chief Guest Vikas Gupta explained working structure of FDCM. He highlighted the importance of environment, sustainable practices and our role in conservation of nature and natural resources. He was impressed about the NGCPR's work and nursery facilities.

After this valuable knowledge, prizes were distributed to the participants.

Dr. Kranti Yardi conveyed the vote of thanks to the guests, participants as well as the team for successfully conducting this program.

This followed a tour of NGCPR. Dr. Datir, Rohit Kumbhar, Pavan Kumatkar and Raviraj Rainak gave a tour of the nursery and NGCPR laboratory. Later participants proceeded with lunch.

List of Winners

- Photography Competition
  1st prize: Aakash Raut, Msc 2nd year (Yashwantrao Chavan College of Science, Karad)
  2nd Prize: Soham Haldikar, Msc Botany 2nd year (The New College, Kolhapur)
  3rd Prize: Kshitij Mahangare, (Rameshwar Vidyalay, Wing)
  3rd Prize: Prajyot Kumbhar, (Yashwantrao Chavan Institute of Science, Satara)

  Consolation 1st: Siddhesh Talekar, (Rameshwar Vidyalay, Wing)
  Consolation 2nd: Arihant Gandhi,

- Poster Competition
  Juweriya Shaikh, Bsc 2nd year, Miraj Mahavidyalaya, Miraj
  Varsha Shinde,
  Aarti Jambhukar
  Akshada Patil

This program involved around 80 registrations from total of 15 schools and colleges for photography and poster competition. Photography competition had a huge response, students' photographs included different landscape, flowers, fruits and trees as well as butterflies. Participants were judged on their skills involving clarity of picture, motive behind taking a picture, exotic/native species, and rare species and overall judgement was taken.

Plate 1 Felicitation of Chief Guest

Plate 2 Dr.Kranti Yardi addressing the audience and guests

Plate 3 Mr. Sandeep Deo sharing information on manufacturing unit

Plate 4 Dr. Sagar briefing about NGCPR

Plate 5 Dr. Bharucha briefing about the importance of ecosystem

Plate 6 Ms. Dagma addressing importance of Conservation

Plate 7 Dr. Kranti talking about significance of research studies and their importance today

Plate 8 Shri Vikas Gupta addressing the audience

Plate 9 Vikas Gupta Sir giving certificate and cash prize to the winners

Plate 10 Vikas Gupta sir giving certificate and cash prize to the winners

Plate 11 Winner sharing his story of taking a picture of the prize winning photograph

Plate 3 Dr. Sagar Datir sharing information on plantations in the nursery

Plate 4 Mr. Rohit communicating valuable information on plants to the students

Plate 5 Photographs and posters display

World Environment Day

Date: 5th June 2023

Naoroji Godrej Center For Plant Research, Shirwal

World Environment Day

Theme of the year - Beat Plastic Pollution

5th June 2023

Every year 5th June is celebrated as World Environment Day. Aim is to improve our environment, to combat issues, to conserve, and to aware people to take action for the protection of the environment.

Events -

- Environment Conservation work of NGCPR
- Nursery & Lab visit
- Walk & Talk quiz & prize

Date - 5th June 2023

Venue - NGCPR, Shirwal

Time - 11:00am to 12:00pm
12:30pm to 1:30pm

Schedule for the Event

Time	Activity
11:00am to 12 pm	Quiz and Lab/Nursery visit for workers
12:30pm to 1:30pm	Quiz and Lab/Nursery visit for employee

Games

Quiz: Individual is asked to pick up 3 cheats from the box full of cheats and answer those questions. On answering 3 correct answers, prize was given.

At 11:30 workers had their lunch and came to NGCPR, where NGCPR team interacted with all the workers and guided them with the game that was arranged for Environment Day celebration. Workers seemed excited and were ready to start the game. Workers were asked to pick up 3 cheats from the box of wrapped cheats having 1 question on each of them. They were given hints when they weren't able to answer the question in one go. Workers cheerfully played the game, also helped their companions to win.

Few workers are farmers as well and have tremendous knowledge about plantations, season cycle and crops. NGCPR team was astonished and overwhelmed by the knowledge exchange while having conversation with these workers. They also had a lot of scientific questions which were addressed by Dr. Kranti & Dr. Sagar.

Later employees came after their lunch. However, employees seemed nervous for the quiz game. Employees had fun while answering the questions and help their colleagues as well. They shared their experience and expressed that such games truly imbibe knowledge, awareness and conservation concepts that are need of an hour.

35 participants including workers and employees participated in this game. 32 of them won the prize.

Prize that was given was an upcycled pouch that was made of jeans that are donated to the upcycling organizations. It signifies a step towards conservation and reducing consumption that is a major problem today.

Awareness towards environment is the objective of NGCPR. Thoughts & Knowledge exchange always help conservation to work on every perspective.

Plate 1: Ecofriendly Rangoli

Plate 2: Eco-friendly Rangoli with a message

Plate 3: Ms. Kranti Yardi offering gift to a worker

Plate 4: Team picture with participants(workers)

Plate 5: Team members offering gifts to the participants

Plate 6: Mr. Ravi Offering gift to an employee

Discussion with employees and workers throughout the program was fruitful and interesting. We all had exchange of knowledge regarding awareness and conservation that is need of an hour. Employees were curious to know and had few questions. Dr. Datir answered their questions and they were satisfied with his answers. Few workers are farmers as well, they were delighted to share experience and locations of various different tree species that are wildly seen in their areas. They had a lot to tell about environmental changes that they have seen over the years specifically in trees, their seeding behavior and overall existence.

Indigenous varieties of crop seeds & Conservation

Date-19th June 2023

Agro biodiversity Awareness and Seed diversity Exhibition (19th Jun 2023)

Sr.no	Time	Particulars	Speaker
1	11.30 AM- 1.00 PM	Interaction with Farmers, Seed savers and Diversity Mapping	SANJAY PATIL and NGCPR team
2	1.00 PM-2.00 PM	Lunch	
3	2.00 PM-2.10 PM	Welcome and felicitation of Guests	NGCPR Team
4	2.10 PM - 2.30 PM	Experiences from grass roots – Seed Conservation	Smt. Rahibai Popere
5	2.30 PM -2.45 PM	Nutrition Garden and seed saving	Smt. Mamatabai Bhangare
6	2.45 PM- 3.15 PM	Agro biodiversity conservation for Nutrition security, Livelihood with climate change context (Power point Presentation)	Mr.Sanjay Patil
7	3.15 PM- 3.20 PM	Way Ahead and Vote of Thanks	Kranti Yardi
8	3.20 PM – 4.00 PM	SEED EXHIBITION and interaction with genome saviours	BAIF Team

On 19th June 2023 Naoroji Godrej Center for Plant Research Shirwal, Indigenous Seed Conservation and Exhibition program was held with great enthusiasm. The Chief Guest, Padmashri Rahibai Popere known as Bijmata, Annamata Mamtabai Bhangare, Sanjay Patil, Chief Executive Officer of BAIF, Dr. Erach Bharucha was present for this event.

The main objective of this program was conservation and promotion of indigenous varieties. Farmers were informed about the importance of indigenous varieties, identification of the variety and how to get the seeds. Along with this, an exhibition of various varieties of indigenous plants was held. Among them various types of ragi, sorghum, rice, sava, rala, maize, kodo millets, pumpkin, chawli, moong bean, ghewda were seen. Dr. Kranti Yardi welcomed the guests and introduced them and requested Rahibai to speak.

Rahibai Popere, who has done unparalleled work in the field of agriculture, lives in Kombhalane village of Akole taluka in Ahmednagar district. She is a breeder of traditional varieties of different crops a farming family. Rahibai was honoured by the Government of India for preserving & propagating indigenous varieties. She was awarded Padma Shri in 2020. Rahibai, who never even went to school, belongs to a tribal village. She had a hobby of collecting seeds from her childhood. They used to collect seeds in traditional way. They used it in agriculture. Later, with the help of BAIF organization, their work got proper direction. Today, Rahibai's 'Deshi Biyane Bank' has 114 varieties of 52 crops such as *Abai, Babai, Ghevada, Pawata, Jowari, Maka, Nachani, Bhopala.* She has been included in the BBC's 100 Most Influential Women.

Plate 1: Rahibai addressing the audience

Rahibai has preserved many varieties of old village leafy vegetables and various beans. It is not available from any international seed company. What Rahibai has is the original form of the seeds that our ancestors ate for hundreds of years. They only have twenty varieties of beans available. She has formed a ‘Bachat Gat’ of three thousand women and farmers. Through them these vegetables are grown in an authentic traditional organic manner and their seeds are preserved in pots. No company in the world has this traditional tasty and natural seed in its original natural form.

“I didn't go to school, but the school of nature taught me a lot and I will continue to work with the values of nature.” The farmer should not depend on chemical farming but should do poison free farming. He advised the attendees that native varieties should be preserved.

Later, Mamatabai Bhangre, popularly known as "Annamata", expressed her thoughts. She has cultivated various varieties of rice as well as about 70 types of wild vegetables namely *Varai, Nagli, Harbara, Masur, Vatana, Raibhog, Ambemohar, Kalabhaat, Gharikolpi, Harikolpi.* Mamta Bai, who developed the Parasbag concept, is known as the 'Parasbag Guide'. He guided the audience on the importance of wild vegetables in our life.

Plate 2:Mamatabai addressing the audience.

BAIF Chief Executive Sanjay Patil informed about the work of BAIF. He guided the audience on why nature conservation is important and what we should do for it. And appealed to participate in the following schemes. Mr. Shahaji Pathade expressed his gratitude on behalf of Godrej staff and promised to be always ready in the work of conservation.Dr. Kranti Yardi thanked everyone and concluded the program

Plate 3:Godrej Lawkim employee appreciating efforts taken by NGCPR and BAIF towords conservation.

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Plate 4: Display of variety of rare species by BAIF.

A variety of food items made by the Women's Savings Groups were available for sale through the Past in Present organization. They included ragi biscuits, murmures, sorghum biscuits, puffed pulses, and pulses.

The award institute Satara had put up for sale the various indigenous seed varieties available with them at the exhibition

Many farmers from Satara district visited for this program. Also, the employees of Godrej Lawkim Motors responded promptly

Plate 5: Display of products made from various millets by Past in Present Agro.

Plate 6: Display of various millets by Award Sanstha.

Plate 7: Display of indigenous variety of various seeds

Plate 8: Workers curious to know about the conservation and preservation of indigenous seed varieties preserved by BAIF

Plate 9: Audience includes workers at Godrej Lawkim

Plate 10: Different variety of crops presented at exhibition by BAIF

Plate 11: Padmashree awardee Mrs. Rahibai Popere

Plate 12: Mrs. Mamata Bhangare

Plate 13: Dr. Sanjay Patil from BAIF addressing their work on conservation of rare species

Plate 14: Dr. Bharucha conveying importance of conservation to the audience

Teacher Training Workshop

Date-11 July 2023 To 12 July 2023

Teacher Training Workshop

Day 1- Tuesday 11 July 2023

Sr.no	Events	Timing	Speaker
1	Registration and Tea/Snacks	10:00am to 10:30am	NGCPR Team
2	Introduction to the Workshop	10:30am to 11:00am	Dr.Kranti Yardi, Dr. Erach Bharucha & Mr. Subhash Badve
3	NGCPR Introduction	11:00am to 11:10am	Dr. Sagar datir
4	Introduction of all participants	11:10am to 11:30am	NGCPR Team

5	Biodiversity of Maharashtra	11:30am to 12:30pm	Dr. Erach Bharucha and Dr. Kranti Yardi
6	Foodchain Activity	12:30pm 10 1:45pm	Ms. Radhika Jagtap
7	Lunch Break	1:45pm to 2:00pm	
8	Science Kit Practical	2:00pm to 3:00pm	Ms. Surekha Bhalerao
9	Nakshatravan	3:00pm to 4:00pm	Mr. Subhash Badve

Day 2- Wednesday 12 July 2023

Sr.no	**Events**	**Timing**	**Speaker**
1	Nature trail	9:00am to 10:00am	NGCPR Team
2	Information on the project of NGCPR	10:00am to 11:15am	Dr. Kranti YArdi
3	Biodiversity a Sustainable development	11:15am to 1:15 pm	NGCPR Team
4	Lunch Break	1:15pm to 2:00pm	
5	Communication and Management activity	2:00pm to 3:00pm	Dr. Shivam Trivedi
6	Vote of thanks and feedback	3:00pm to 3:30pm	NGCPR Team

The teacher training workshop was organized at Ajnuj Activity center at Ajnuj on July 11 & 12, 2023.

The main objective of this program was to – orient school teachers on environmental issues and make them understand sustainability so that they can inculcate concepts among school students through their teaching program.

The workshop was inaugurated by planting trees by the teachers present for the training. On this occasion Mr. Subhash Badve (IFS), Dr. Kranti Yardi, Dr. Shivam Trivedi, Dr. Sagar Datir and teacher representatives from various schools were present. Dr. Erach Bharucha, an environment expert was present to orient the teachers through the workshop. The plants included medicinal and aromatic plant species, butterfly attracting plants during the plantation.

Plate 1 Introductory session started with some plantations

Plate 2 Teachers present for workshop, planting the saplings

Speaking on this occasion, Dr. Bharucha said that in the process of globalization, it is important to understand the issues of climate change and temperature rise in a broader perspective. He also stressed about how important environment is for human life and why we should conserve it.

Date. 11 July 2023

On Tuesday, July 11, 2023, the following sessions were organized.

All those present for the training, introduced themselves. Dr. Kranti Yardi introduced the environmental program that NGCPR will conduct for the participants and explained the importance of conservation for protecting the environment.

Dr. Datir conducted a presentation on NGCPR which covered Introduction, Mission, ongoing projects, Research Methodology, Research Work, to give an overview of NGCPR activities.

Plate 3 Dr. Kranti addressing the audience with some insights of the program

The first session was conducted by Dr Bharucha on Biodiversity of Maharashtra. He focussed on the rich biodiversity heritage that the state has with four different biogeographic regions; the Western Ghats, Coastal area, Northern teak forest belt and the Deccan Plateau region. He also explained the unique position of Shirwal area where the schools are located and why there is a need for conservation in this area. The increasing pressures of industrialization, agriculture is affecting the biodiversity of the area. Importance of conservation to have sustainable development was focused by him.

Plate 4 Dr. Bharucha sharing some insights of need for conservation

Food chain Importance through a game

In this session, Dr. Kranti Yardi introduced food chain to the participants through a game. While explaining the food chain from producers to primary consumers, secondary consumers, the formation and dependence of various organisms were explained.

It was explained how stress on one component of the food chain affects the other component. Discussions were held how the food chain under stress can be repaired. The importance of the food chain was explained to all the participants by playing the role of plants, insects and wildlife components in the environment. Plants play a role of primary producers in the environment. like Grass. Microorganisms, insects, herbivores etc. depend on them. Each of the teacher was given a card with a component of food chain like banyan tree, grass, grasshopper, insects, tiger, etc and each teacher had to pass the thread to someone and say why he is doing so. This increased the participation of teachers and made it interesting for teachers. One of the components like tiger becomes extinct how all the threads collapse was demonstrated.

Science Experiments:

In the afternoon session Dr. Surekha Bhalerao gave information about science kit. Students have many types of science experiments in the curriculum and it is difficult to understand them from books. The idea of this kit came from the difficulties faced by the students in their studies and their own experiences.

Plate 5 Ms. Surekha Bhalerao presenting their science kits that are made for students of 6th, 7th and 8th standard

He created this kit so that the science experiments in the school curriculum could actually be done. She demonstrated two experiments from the kit and showed the teachers the experiments present in the kit.

Three kits are made for 6th, 7th and 8th standard for children according to their grade and syllabus.

Mr. Sachin Dhande demonstrated low-cost solar powered devices. People in rural areas can get employment through solar equipment. He envisioned an industry that could be started with very little capital and equipment that anyone could make. He demonstrated how to build a solar unit with just five minutes of assembly. Through many organizations he has created means of employment for blind and disabled people. He himself is a mechanical engineer and his work has reached abroad.

Shri Subhash Badve (IFS) gave guidance on tree conservation through the concept of Nakshatravan. An ancient tree and its Ayurvedic importance were explained. References to plants are found in mythological books and texts. Trees that are supposed to be planted near the village, trees that must be planted outside the village are mentioned with logical reasoning. From the Rigvedic period to the Puranic period, deities are seen worshiping deities of the Nakshatras. After studying the mythological texts, the book 'Nakshatravan' was written by Subhash Badve, he also gave information about the same. A copy of the book was given to participants as resource book Dr. Kranti Yardi concluded the first day by thanking everyone.

Plate 6 Mr. Subhash Badve addressing the audience

Date. 12th July 2023

On Wednesday, July 12, 2023, the following sessions were organized.

Field visit to the nature trail Along with Dr. Kranti Yardi, the participants took a walk to study the various species of trees at the nature trail. Dr. Kranti Yardi explained importance of local trees found in the area, their role in the ecosystem, native and exotic species and the dependence of various insects and birds on trees for shelter, nesting and food. Although some species of exotic trees have adapted to the local environment, preference should be given to planting native trees and specimens where possible, as native insects and birds prefer to live symbiotically with these trees and plants. The trainees were asked to form groups and were given paper and asked to write issues related to various environmental hazards for each type of ecosystem namely Wetland, Forest, Grassland, Aquatic. All groups participated eagerly; all presented their issues. Later, issues were discussed with all the participants in a discussion session. This activity was meant to make the teachers understand three pillars of sustainability. This was done through their participation so that they should understand sustainability well.

A session on how to do a project was conducted by Dr Yardi. This was an important session as later each school has to carry out a project in the school, so the format of data collection to systematic documentation to conclusion was explained to all the teachers.

Dr. Shivam Trivedi taught space management through a game and informed about the consequences if a component of the ecosystem disappears or is lost. By doing this type of activity with school children, they may develop interest in the understanding environment, its conservation to a greater extent.

Questions and discussions were held based on the issues raised in the various sessions throughout the day. Dr. Kranti Yardi cleared the doubts of the trainees. Outline of the upcoming programs conducted by the institute was given and were informed about involving students in these interesting activities to develop keen interest and knowledge about today’s environment status.

Finally, teachers were asked if they would like to have tree plantation program in their school and if they can list down what type of plants they need like big trees, medicinal plants, aromatic plants etc.

Conclusion

The last session was feedback and certificate distribution. The attendees put the name of teacher who thanked for workshop expressed their gratitude for inviting them for this engrossing training workshop. Dr. Kranti thanked all the trainees and guests who attended the two-day 'Teacher Training Workshop' for their response and concluded the programme.

Plate 5 Dr. Yardi explaining the food chain, its dependency on each strata and its importance

Plate 6 Dr. Bharucha explaining the importance of balancing the foodchain

Plate 8 Nature Trail: Dr. Kranti guiding the teachers about importance of grassland ecosystem and its biodiversity

Plate 7 Teachers trying to observe the biodiversity around the activity center

Plate 9 Mr. Sachin Dhande explaining their solar panel unit and its easy assemblance with a vision of conserving natural resources and sustainable lifestyle

Plate 10 Dr. Sagar addressing information about NGCPR

Plate 9 Teachers working on their topic, understanding the activity and making their charts for the presentation

Plate 10 Techers presented their work with excellent explanation

Plate 11 Dr. Yardi explaining three pillars of Sustainable development

Plate 12 Dr. Shivam conducting the activity for teachers

Feedbacks from Teachers

1. Shri. Pawara Bhaidas B, Rajendra Higher Secondary School, Khandala

   NGCPR is doing exemplary work in the field of environmental conservation and biodiversity and has set an ideal for everyone. The advice to NGCPR organization would be that your work is worth more than money. We should spread it across the state / country level

2. Shri. Mane Dnyanesh M, New English School, Bholi

   The guides in the workshop gave information about biodiversity, environment, economy, social environment in a good manner.

3. Mr. Sunil Kokate, Adarsh Vidyalaya, Shirwal

   I really liked the information and the activities that were taken, mainly grassland conservation.

4. Mr. Santosh Vasavi, Shri Samarth Vidyamandir Kanheri

   The workshop was outstanding! The way you explained environmental concepts in a simple and engaging manner was truly impressive. The practical examples and hands-on activities were particularly beneficial. Thank you for an enlightening experience!

5. Mr. Rahse , KSP vidyalay, Naigaon

   "I thoroughly enjoyed the workshop! It was interactive, engaging, and packed with valuable information. The group activities and discussions were very effective in reinforcing the key points. Thank you for making learning so enjoyable!"

Plantation Drive

Schedule for Plantation

Sr.no	School name	Date of Plantation
1	Shri Samartha Vidyamandir, Kanheri	19th July 2023
2	New English School, Bholi	25th July 2023
3	Vasantrao Pawar-Patil Vidyalay, Bhadawade	25th July 2023
4	Raireshwar Madhyamik Vidyalay, Titheghar	01st August 2023
5	Vidyapratisthan Bhor English Medium School, Bhor	02nd August 2023
6	Zilla Parishad School Pisaware, Bhor	03rd August 2023
7	Panchakroshi Mahavidyalay, Lohamjawale	15th September 2023
8	Zilla Parishad School, Bholi	07th September 2023
9	Srinath Vidyamandir, Alasand	18th October 2023

NGCPR has always aimed to preserve, conserve and aware people about indigenous varieties of different plant species of Western Ghats. It has also contributed to scientific research and addressed challenges posed by climate change.

Deforestation being one of the most prevailing challenge all over the globe. Plantations serve several important purposes and have been established for various reasons throughout history. It is a need of an hour to serve various conditions such as global warming, ozone layer depletion, natural resource management, carbon sequestration etc.

A small-scale project under FDCM of NGCPR named ‘Plantation Drive’ for schools and colleges was initiated for the same. Schools of Khandala and Bhor Talukas of Satara District were covered for this project. Schools were lacking indigenous varieties of trees but had exotic aesthetic looking trees.

Type of plants and their themes were planned and decided based on discussions held with Principal & teachers of each school. Requirement of schools, area of school, soil fertility, soil type, water availability, amount of rainfall & plant characteristics were various parameters taken into consideration for this project.

Various concepts were anticipated for the project such as Nakshatravan, Medicinal garden, Kitchen garden, aromatic garden along with trees that grow big.

Plantation Themes

Nakshatravan

Nakshatra: In Hindu astrology and astronomy, a Nakshatra is a lunar mansion or a constellation. The Moon moves through the sky and passes through different Nakshatras, each with its unique characteristics and symbolism. Nakshatras are often used in horoscope calculations, especially in Vedic astrology.

Van: In Sanskrit, "van" means forest or garden.

"Nakshatravan" could potentially refer to a garden or forest associated with a particular Nakshatra. In Indian astrology and mythology, various Nakshatras are associated with different qualities, deities, and symbols. So, a Nakshatravan could theoretically be a garden or space designed or dedicated to a specific Nakshatra, where people might perform rituals, meditate, or connect with the energies and symbolism associated with that Nakshatra.

Medicinal Garden: A medicinal garden, also known as a medicinal herb garden or herbal garden, is a specially designed garden that is cultivated with various plants and herbs for their medicinal properties. The primary purpose of a medicinal garden is to grow, preserve, and utilize plants that have therapeutic benefits for human health.

Floral Garden: A floral garden, often referred to as a flower garden, is a cultivated area where a diverse range of flowering plants are grown primarily for their aesthetic and ornamental value. Floral gardens are designed to showcase the

beauty and diversity of flowers, creating visually pleasing and harmonious landscapes.

Butterfly garden: A butterfly garden is a carefully designed and cultivated garden that aims to attract and provide a suitable habitat for butterflies. These gardens are created with the primary goal of supporting the life cycle of butterflies, including their various life stages such as egg, larva (caterpillar), pupa (chrysalis), and adult. Key aspects are plant selection, host plant, water source, sunny locations etc

Shri Samartha Vidyamandir, Kanheri

School Background

Region: Rain shadow region

School Area: half acre

Water availability: Moderate

Total Plants given & planted: 40

Early morning, teachers of the school had arranged some snacks and tea for NGCPR team. Later to breakfast, plantation program started at 9:00am along with students and teachers with full enthusiasm. Teachers of this school were proactive and encouraged students to plant trees. Students themselves took the tools and dug holes to plant trees. They eagerly asked about name of each plant their benefits. Later to plantations, all teachers and NGCPR team had lunch and discussion about various plants that we planted throughout the day. Concept of Nakshatravan plantation was introduced in this school.

After lunch, felicitation program for the team of NGCPR was arranged. Students prepared bouquets from flowers in the school garden. Raviraj, Rohit and Radhika were felicitated during this program. Raviraj addressed the students about the work of NGCPR and activities that we take. He encouraged them to engage in these projects. Rohit also conveyed the information on dos and don’ts that are supposed to be taken while maintain trees that are planted. He also briefed about other upcoming activities that are beneficial for students.

Total Participants: 8^{th} and 9^{th} standard 30 students

Plantation Drive by NGCPR					
School/College NAME:	Shri Samartha Vidyamandir, Kanheri				
Date of Plantation:	18-07-2023				
Plants	Count	Plants	Count	Plants	Count
Madhumalti double	1	Adulsa	1	Bixa	1
Ananta	1	Kala dhotra	1	Sita ashok	1
Ioxra	1	Bel	1	Bahava	1
Pashan bhed	1	Bibba	1	Bakul	1
Parijatak	1	Lavang tulas	2	Palas	1
		Kapur tulas	2	Arjun	1
		Sabja tulas	2	Kadamb	1
Putranjiwa	1				
Undi	2	Ramtulas	2	Kaatesawar	1
Buch	1	Krishna tulas	2	Hadga	1
Nandrukh	1	Dongri davna	1	Moha	1
Kumbha	1	Murudsheng	1		
Kinjal	1	Kali nirgudi	2		
TOTAL = 40					

Plate 1 Kanheri School Plantation

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Plate 2 Teachers along with student planting the sapling

Plate 3 Students planting the sapling

New English School, Bholi

School Background

Region: Rain shadow region

School Area: Around 1 Acre

Water availability: Moderate

Total Plants given & planted: 89

Principal Sir and Teachers greeted the staff of NGCPR. 25 students of 8th and 9th standard along with the team of NGCPR started the plantations. Medicinal, flowering plants and big trees were planted in this school. Various Nakshatravan

tree saplings were provided as well. Students were enthusiastic and cooperated the NGCPR team for plantations. Benefits and maintenance strategy for plants was conveyed to students. Students earlier had prepared kitchen garden, maintenance for same was explained by Raviraj. Teachers took a keen interest in knowing the importance of trees and ensured students understand its maintenance.

Plantation Drive by NGCPR					
School/College NAME:	New English School Bholi				
Date of Plantation:	25-07-2023				
Plants	Count	Plants	Count	Plants	Count
Madhumalti double	2	Adulsa	2	Tamhan	1
Ananta	2	Kala dhotra	2	Sita ashok	1
Hajari mogra	2	Shatavari	2	Palas	2
Kate koranti 5prakar	20	Vekhand	2	Awala	2
Damini	2	Rui	2	Kadamb	1
Parijatak	1	Lal adulsa	2	Umbar	2
Kapur tulas	2	Bel	2	Buch	1
Sabja tulas	2	Bibba	2	Biwla	1
Ramtulas	2	Nirgudi	2	Undi	1
Krishna tulas	2	Lavang tulas	2	Hadga	2
Dongri davna	2	Gavti chaha	2	Bedki	2
Lendi pimpali	1	Murudsheng	1	Kaligunj	2
Lal gunj	2	Kali nirgudi	2		
Pandhari gunj	2	Damvel	2		
		Total = 89			

Plate 4 Teachers along with students planting the sapling at Bholi New English School

Plate 5 Students planting the sapling

Plate 6 Students digging up mud to plant the sapling

Raireshwar Madhyamik Vidyalay, Titheghar

School Background

Region: Rain shadow region

School Area: half acre

Water availability: High rainfall

Total Plants given & planted: 77

This school adopted the concepts of Nakshatravan, medicinal as well as flowering plants. Principal and teachers actively participated with the students. 20 students participated in the plantation drive. Raviraj and Rohit addressed the steps to maintain the plants and its importance as well. They also explained about the various activities that NGCPR has initiated for students to create environment awareness among them. Teachers had also arranged lunch and discussion session with the team of NGCPR to discuss on further collaboration on various activities.

Plate 7 Students, teachers along with NGCPR team

Plantation Drive by NGCPR					
School/College NAME:	Raireshwar Madhyamik Vidyalay, Titheghar				
Date of Plantation:	01-08-2023				
Plants	Count	Plants	Count	Plants	Count
Kusarvel	2	Shatavari	2	Tamhan	1
Madhumalti double	2	Rui	2	Bahava	1
Raanjaai	2	Bel	2	Palas	2
Kate koranti	14	Bibba	2	Arjun	1
Parijatak	1	Nirgudi	3	Awala	1
Shami	2	Dongri davna	4	Kaatesawar	2
Dhawda	1	Kali nirgudi	3	Umbar	5
Gela	1	Lal gunj	1	Nandrukh	1
Karanj	3	Pandhari gunj	1	Shendri	1
Jambhul	1	Kaligunj	1	Moha	1
bhed umbhar	3	Korfad	2	Pangara	1
Bhokar	1	Kadipatta	2	Temburni	1
Kawat	1				
Total = 77					

Plate 8 Raireshwar School Principal receiving a plant sapling from NGCPR (FDCM)

Plate 9 Students planting the trees

Vasantrao Pawar-Patil Vidyalay, Bhadawade

School Background

Region: Rain shadow region

School Area: half acre

Water availability: High rainfall

Total Plants given & planted: 37

Principal and teachers along with students greeted NGCPR team. Students of 8th and 9th standard were full of energy for plantations. School wanted Nakshatravan in their backyard. This school had a lot of space of plantations. In the backyard, Nakshatravan tree plantation took place, whereas, in the frontyard towards the stage, flowering plant saplings were planted. Towards the edge of school ground, various big tree saplings were planted. School Principal himself wished to have different varieties of medicinal plants such as tulsi, adhulsa, NGCPR provided the same. Importance of these plants and their use was rightly addressed. Work of NGCPR and activities that are taken for school students on environment, conservation and awareness were explained. Principal encouraged the students to participate in these activities to understand environment and its need for conservation.

Plantation Drive by NGCPR					
School/College NAME:	Vasantrao Pawar-Patil Vidyalay, Bhadawade				
Date of Plantation:	25-07-2023				
Flowering/ Climbers	Count	Medicinal	Count	Trees/Shrubs	Count
Madhumalti double	4	Shatavari	2	Tamhan	1
Ananta	2	Rui	1	Sita ashok	2
Damini	3	Bel	1	Bahava	1
Parijatak	1	Lavang tulas	2	Palas	1
Dongri davna	2	Kapur tulas	2	Arjun	1
Nandrukh	1	Sabja tulas	2	Kadamb	1
Bixa	1	Ramtulas	2	Kaatesawar	1
Putranjiwa	1	Krishna tulas	2		
TOTAL = 37					

Plate 10 Students of Vasantrao Pawar-Patil Vidyalay planting the sapling

Plate 11 Mr. Rohit (FDCM, NGCPR) communicating benefits, importance of the trees planted.

Vidyapratisthan Bhor English Medium School, Bhor

School Background

Region: Rain shadow region

School Area: half acre

Water availability: High rainfall

Total Plants given & planted: 45

Plate 12 NGCPR Team, Principal and Teachers of Bhor English Medium School

Principal welcomed NGCPR team with some tea and snacks. Principal escorted Dr. Kranti to the premises of the school and then to the program hall. NGCPR team was greeted by a sapling as a token of love and a greeting card. Dr. Kranti addressed the audience about the history of Western Ghats, its importance and necessity to preserve and conserve this zone. She also encouraged students to participate in upcoming activities with enthusiasm.

Dr. Sagar Datir brief the students about visions, missions, and objectives of NGCPR and conservation of indigenous varieties of plants. Importance of host plants for birds and butterflies as well as animals was explained. He also talked about significance of Western Ghats, type of plants that are found here and their nutritional importance in diet of locals. He encouraged students to preserve and conserve this treasure as being the next generation.

Later to this lecture, saplings were given to each class with aim to conserve and maintain the tree. Students cheerfully took over the charge to grow the sapling. Principal assured to take care and maintain the saplings with care.

Plantation Drive by NGCPR					
School/College NAME:	Vidyapratisthan Bhor English Medium School, Bhor				
Date of Plantation:	02-08-2023				
Plants	Count	Plants	Count	Plants	Count
Kusarvel	1	Adulsa	1	Tamhan	1
Sayali	1	Kala dhotra	1	Sita ashok	1
Madhumalti double	1	Shatavari	1	Bakul	1
Raanjaai	1	Vekhand	1	Awala	1
Veli deochafa	1	Lal adulsa	1	Kadamb	1
Aboli pink	1	Bel	1	Ritha	1
Ananta	1	Bibba	1	Hadga	1
Ioxra	1	Lavang tulas	1	Lal gunj	1
Damini	1	Kapur tulas	1	Pandhari gunj	1
Pashan bhed	1	Sabja tulas	1	Kaligunj	1
Parijatak	1	Ramtulas	1	Gavti chaha	1
Rudraksh	1	Krishna tulas	1	Korfad	1
Kapur	1	Murudsheng	1	Kadipatta	1
Shami	2	Kali nirgudi	1	Lendi pimpali	1
Ajaanvruksh	1	Damvel	1		
TOTAL = 45					

Plate 13 NGCPR Team with Students, Teachers and Principal of English medium School, Bhor

Zilla Parishad School Pisaware, Bhor

School Background

Region: Rain shadow region

School Area: Half acre

Water availability: Heavy rainfall

Total Plants given & planted: 64

Pisaware School has already done substantial amount of work in the field of environment. They have various ongoing projects such as studying butterfly behavior and its host plant, assessment of eggs etc. They have a huge collection of data of birds in and around their school. Total 25 students of 8th & 9th standard participated in the plantation drive. They adopted the concept of Nakshatravan for their ground. They also specifically preferred host plants for butterflies to reside in their garden area, so NGCPR provided them with those saplings. Despite heavy rains, students enthusiasm to plant trees did not slow down, moreover was encouraged by teachers. The teacher's words rang true: "They are the sons of this soil, children of Mother Earth herself, unafraid to embrace the rain.

Plantation Drive by NGCPR					
School/College NAME:	Zilla Parishad School Pisaware, Bhor				
Date of Plantation:	15-09-2023				
Plants	Count	Plants	Count	Plants	Count
Jai	2	Adulsa	2	Tamhan	1
Jui	2	Shatavari	1	Sita ashok	1
Mogra	2	Rui	3	Bahava	1
Madhumalti double	2	Lal adulsa	1	Bakul	1
Aboli pink	2	Dongri davna	1	Palas	1
Ananta	1	Murudsheng	1	Arjun	2
Ioxra	1	Lal gunj	1	Kadamb	1
Damini	2	Pandhari gunj	1	Kaatesawar	2
Putranjiwa		Kaligunj	1	Umbar	2
Sarpgandha		Kadipatta	2	Bixa	1
Pangara	2	Jambhul	1	Kumbha	1
Undi	1	cher	2	Kinjal	1
Kawat	1	Karaj	2	Moha	1
Bhed umbar	3	Limbu	1	Ritha	1
pimpal	2			Shivan	2
TOTAL = 64					

Plate 14 Students of Pisaware School digging up pits to plant the sapling

Plate 15 Students planting

Plate 16 Students, teachers and Sarpanch of Pisaware School

Panchakroshi Mahavidyalay, Loham-jawale

Region: Rain shadow region

School Area: One Acre

Water availability: Moderate availability

Total Plants given & planted: 78

School started with the Morning Prayer and National Anthem, Principal invited NGCPR team for the Morning Prayer session itself. NGCPR team was greeted with small token of love of flowers and a coconut. Mr. Raviraj talked about NGCPR and its aim, objectives and activities that we conduct for awareness, education and communication of Environment for school and college students. He also mentioned about the conservation, research work of NGCPR on

especially plant biodiversity. Later 8th and 9th standard students, total of around 30 along with teachers planted trees on the edges of their school ground. Mr. Rohit and Ms. Radhika explained students about the importance of trees that were planted. Students asked various questions related to climate change and planting trees of indigenous varieties, its relation with ground water level etc. Teacher's active participation was seen in the plantation drive.

Plantation Drive by NGCPR					
School/College NAME:	Panchakroshi Mahavidyalay, Lohamjawale				
Date of Plantation:	15-09-2023				
Flowering/ Climbers	Count	Medicinal	Count	Trees/Shrubs	Count
Jui	2	Adulsa	5	Tamhan	1
Mogra		Shatavari	2	Sita ashok	1
Madhumalti double	1	Lal gunj	1	Bahava	1
Aboli pink	2	Pandhari gunj	1	Bakul	1
Ananta	2	Kaligunj	1	Palas	1
Ioxra		Kadipatta	2	Arjun	1
Damini	2	Kala Dhotra	1	Kadamb	1
Hajari mogra	22	Bel	1	Kaatesawar	1
Katekoranti	5	Bibba	2	Umbar	1
Parijatak	1	Nirgudi	2	Bixa	2
Shami	1	Sabja Tulas	2	Kumbha	1
Pangara	1	Ram Tulas	3	Awala	1
Undi	1	Dumvel	1	Bhokar	1
Dhavada	1	Vekhund	2	Ritha	1
Bhed umbar	3	Kali Nirgudi	2	Nandrukh	1
pimpal	1	Kadipatta	1	Lal Adhulsa	2
Karanj	1	Aleovera	1		
Bibba	2	Gavti Chaha	2		
TOTAL = 78					

Plate 17: Students of Lohamjawale school planting the saplings

Plate 18: NGCPR team with students

Zilla Parishad School, Bholi

School Background

Region: Rain shadow region

School Area: Half acre

Water availability: Heavy rainfall

Total Plants given & planted: 25

Plate 19: Dr. Kranti planting a tree sapling along with Principal of Bholi School

At the meeting with Principal, Dr. Kranti introduced the objectives of NGCPR and its work towards conservation. Principal along with staff teachers were present for the meeting. Later, principal, teachers and few students along with NGCPR team planted trees on the edge of ground. Principal felicitated Dr. Kranti and NGCPR team with a small token of love of flowers and a coconut.

Principal thanked Dr. Kranti for coming in for this activity and ensured to collaborate on upcoming events as such for environment

Plantation Drive by NGCPR					
School/College NAME:	Zilla Parishad School, Bholi				
Date of Plantation:	07-09-2023				
Flowering/ Climbers	Count	Medicinal	Count	Trees/Shrubs	Count
Jui	2	Adulsa	2	Tamhan	1
Parijatak	1	Shatavari	2	Nandrukh	1
Madhumalti double	1	Gavti Chaha	1	Pangara	1
Aboli pink	2	Kadipatta	2	Awala	1
Ananta	2	Kala Dhotra	1	Palas	1
Ioxra	2	Shami	1	Kadamb	1
TOTAL = 25					

Plate 20: NGCPR Team with Bholi School's Principal and students

Srinath Vidyamandir, Alasand

Region: Moderate rainfall region

Water availability: Moderate availability

School Area: 2.5 acre

Total Plants given & planted: 100

Plantation Drive by NGCPR					
School/College NAME:	Srinath Vidyamandir, Alasand				
Date of Plantation:	18-10-2023				
Plants	Count	Plants	Count	Plants	Count
Madhumalti double	2	Adulsa	5	Bhokar	2
Ananta	2	Kala dhotra	2	Sita ashok	2
Ioxra	2	Bel	2	Bahava	2
Pashan bhed	2	Bibba	2	Bakul	2
Parijatak	2	Shatavari	4	Palas	2
Jai	2	Aloevera	2	Arjun	1
Jui	2	Awla	1	Kadamb	2
Kamini	2	Ramtulas	2	Kaatesawar	1
Putranjiwa	1	Lendi pimpli	2	Hadga	1
Tamhan	2	Dongri davna	4	Undi	2
Bhed umbar	1	Murudsheng	1	Buch	1
Barleria	10	Kali nirgudi	4	Nandrukh	1
Shami	1	nirgudi	4	Kumbha	1
Khair	1	kapur	1	Kinjal	1
Pimpal	1	Lal adhulsa	2	Moha	1
Damvel	2	Reetha	1		
Gunj	4	Rui	2		
TOTAL = 100					

Plantation of Nakshatra Vân and Ayurvedic plants.

Plantation drive took place on 18th October 2023 of Nakshatra Van and Ayurvedic plants at Shrinath Vidyamandir, Alsand by Naoroji Godrej Center for Plant Research, Shirwal. This activity was carried out with the aim to preserve and aware students and teachers about indigenous tree varieties and their importance. Firstly, preliminary inspection of the site was done. The land is dry and rocky and the place was full of rodents and bushes. With the help of the students, the land was cleaned and the plan for the Nakshatra van was prepared. The places where the trees were to be planted were marked with white color. Pits were dug out by the students of 9th and 10th standard and workers of Gram Panchayat as well. As

the land is rocky, soil and dung were filled in the pit in order to protect the trees of the Nakshatravan. It was planned to plant a mulberry tree as a fence to the garden. For planting ayurvedic plants, a black soil plot of 10 x 12 was selected and cleaned. It was taken from pits at different distances.

DAY 2

On 19th October 2023 at 8.30 am, tree plantation was started by school students, teachers, Gram Panchayat Sarpanch, Gram Panchayat members and workers. Mr. Rohit Kumbhar Project Officer (FDCM) explained the concept of Nakshatra van to everyone. He guided about the concept of Nakshatra van and its importance. For this, the book Nakshatra van written by Subhash Badve (IFS) was taken as basis. The concept of Nakshatra van has been presented in this book by studying information from mythological texts and Vedas.

आळसंद विद्यालयात वृक्ष लागवड

कोडे/प्रतिनिधी:

स्वामी विवेकानंद शिक्षण संस्था संचलित श्रीनाथ विद्यामंदिर आळसंद येथे आज एक आगळावेगळा उपक्रम राबवण्यात आला.

सांगली जिल्ह्यामध्ये कोणत्याही माध्यमिक शाळेमध्ये नाही अशा प्रकारचे नक्षत्र गार्डन आणि बॉटनिकल गार्डन ही संकल्पना विद्यालयाचे माजी विद्यार्थी विशाल कुंभार आणि रोहित कुंभार यांच्या नाविन्यपूर्ण कल्पकतेतून साकार करण्यात आली. नौरोजी गोदरेज प्लांट रिसर्च सेंटर यांच्या विद्यमानाने वेगवेगळ्या वनस्पतींची वृक्षांची लागवड शाळेच्या परिसरामध्ये करण्यात आली.

सदर वृक्षारोपण कार्यक्रमावेळी सरपंच अभिनंदन जाधव उपसरपंच पोपटराव बारबट्टे सर्व सदस्य तसेच शाळा व्यवस्थापन समितीचे अध्यक्ष अविनाश जाधव, आळसंद केंद्राचे केंद्रप्रमुख दिलीपकुमार सानप साहेब मुख्याध्यापक कोगनोळे एस डी विद्यालयाचे सर्व शिक्षक व शिक्षकेत्तर कर्मचारी उपस्थित होते. तरुण पिढीच्या कुशाग्र बुद्धीतून निघालेल्या या नावीन्यपूर्ण आणि पर्यावरण पूरक उपक्रमाचे सर्व मान्यवरांच्या कडून कौतुक केले जात आहे.

Plate 21: Mr. Rohit carried out plantation drive at Srinath Vidyamandir, Aalsand along with students of 9th and 10th standard and teachers.

Gram Panchayat Sarpanch Shri. Abhinandan Jadhav started the tree plantation by planting a sapling of Peepal tree. Later, Nakshatravana tree plantation was done through school principal and gram panchayat members as well as students and teachers of the school.

A medicinal garden was created outside the school office. Shatavari, Kaladhotra, Red Adulsa plants were planted in this. Along with this, various flowers and various indigenous trees were also planted in the school premises. On this occasion, Sarpanch Mr. Abhinandan Jadhav, Deputy Sarpanch Mr. Poptrao Barbatte, all members as well as Chairman of School Management Committee Mr. Avinash Jadhav, Center Head of Aalsand Center Mr. Dilip Kumar Sanap Saheb, Principal Mr. Kongole S.D, all the teachers and non-teaching staff of the school were present.

Plate 22: Students planting tree saplings.

Bonsai Workshop for College Students

Date: 8th August 2023

A bonsai training workshop was organized on 8th August 2023 through Naoroji Godrej Center for Plant Research, Shirwal. The workshop was conducted to provide vocational perspective to rural students and generate new income streams. Students aged 20 to 24 from different areas participated in the said workshop. Shailaja Kapila of 'Kapila Creations' was present as a guide for this workshop. Ms. Shailaja is a professional bonsai artist. She has been working in this field for many years.

The program started by planting trees by our guests for the day. Dr. Kranti Yardi introduced herself to all the trainees and welcomed everyone. All the trainees present, gave a brief introduction about themselves. Dr. Datir gave a brief about NGCPR, its objectives and work so far. While giving information about bonsai, Ms. Shailaja said that the art of bonsai originated in India and then spread to China and Japan. Chinese monks developed bonsai in monasteries as a spiritual practice to bring peace to Buddhism. 100-year-old bonsai can be found in Japan.

Materials needed and steps taken for making a bonsai-

Ms. Shailaja addressed that to make a bonsai, one has to select the plants in a certain way. One has to make a soil mixture that will drain the water properly. Bonsai are classified into different types based on their size, design and according to the type of bonsai you want to make. It is important to imitate exactly the way the structure of trees is formed in nature. Many aspects of nature have to be considered during the preparation of bonsai.

Plants of wad, pimpal, umber, tamarind and suchiparni trees are specially selected for bonsai. The plant should be about one to two years old. The choice of tree is an important matter. The better the shape, the more attractive the bonsai looks.

Choosing the right container for planting bonsai is an essential element of the art. Bonsai pots are usually earthenware, with or without a colored outer glaze and may be round, oval, square, rectangular, octagonal, and may have one or more drainage holes in the bottom. Containers are carefully selected to harmonize the color and scale of the plant. If the container is rectangular or oval, the plant is planted in the center point or according to the spread of the branches. The plant is placed slightly off center in a square or round container. It is trimmed to the desired shape and tied with aluminum wire. Then on regular intervals, necessary changes are to be made.

Moss is added to the upper part, this creates a cooling effect on the bonsai and helps to create a green look. Stones of various sizes are also used to elevate the plant. Various small artifacts can be added to make it look good.

All the trainees were given a selected plant, flat pot and other materials required for bonsai. Ms. Shailaja demonstrated the process of making a bonsai. Everyone started designing bonsai according to their preferences. Ms. Shailaja and her team were helping everyone wherever needed.

25 bonsai were produced through all the trainees by the end of the workshop. Participants were encouraged to make at least two more bonsai.

Bonsai is a very old art. This art can be used to reduce stress in today's stressful life.

Bonsai can be a great business considering the growing demand for beautification. The workshop aimed to inculcate a professional attitude among the students and develop their skills. Through this art we can meet our financial needs and we can use this art as a side business. After the program, everyone expressed their opinion. Dr. Kranti thanked everyone for coming and actively participating in the workshop.

Plate 4 Speaker Ms. Shailaja Kapila along with Dr. Kranti planting a sapling as to inaugurate the workshop

Plate 4 Dr. Datir briefing about NGCPR

Plate 4 Ms. Shailaja Madam explaining about Bonsai

Plate 4 25 Bonsai prepared by these participants along with NGCPR team

Plate 5 Bonsai Plant

Seed Collection Competition

Seed Collection Report

Various environmental complementary activities are organized through Naoroji Godrej Center for Plant Research, Shirwal. In order to encourage nature conservation and familiarization with nature, students were asked to collect different seeds during the summer vacation also known as a 'Desi Seed Collection' drive. 35 schools of Bhor taluka participated in this.

February to May is the fruit bearing period of many plants. In this month, many plants produce their seeds and spread them in nature. When it rains in the month of June, these seeds produce seedlings and the cycle of nature continues but sometimes these seeds do not take root properly and new plants do not form from them. Over time, the number of these plants decreases and they are on the way to extinction. We have to take responsibility for this cycle so that it runs smoothly. Collecting these seeds and processing them properly, producing plants from them and planting them back in nature can reverse this cycle. If these seeds are provided with a nutritious environment, they will survive otherwise the rate of spoilage is high.

If these seeds are properly collected and planted in the wild after rooting, then its growth rate is good.

The main objective of this project was to let the students of the school get to know the trees of their locality, to know what their seeds are like, to know their uses and to develop an interest in the environment at an early age. It was mainly asked to collect seeds of tree species. It included indigenous species and regional plants like Arjun, Ain, Hirda, Behda, Ritha, Khadshingi, Bahawa, Chinch, Pangara.

Instructions were given on proper seed storage method and how to take care of the seeds to prevent spoilage.

At the same time, they were asked to record the regional name and location of that tree.

The initiative received an enthusiastic response from the students. The NGCPR team went to each school and collected the seeds collected by the students. About 2500 seeds of various types of indigenous trees were collected. The winners were selected by experts who followed the given rules and conditions.

Different seeds were collected by school students. Total 10 schools participated in this event. Conservation of some rare species is done through NGCPR under which plant seeds are collected from nature. Not every time the seed will take its root in nature, it needs to be given some treatment. Seeds that do not germinate naturally are treated to increase their germination capacity. Conclusions are drawn by giving different treatments and the best method is implemented. These included Tetu Medhshingi, Erinocarpus, Abai, Hirda, Behda. Based on these experiments, the germination capacity of the seeds was increased from 50 to 90 percent.

The winners were given appropriate prizes. Participation certificates were given to each participant. The teachers of the school helped a lot in this activity and assured to participate in conservation work from here on.

Plate 1: Seeds collected by students

Prize Distribution

Plate 2: Student from Shri Samartha Vidyamandir, Kanheri received 1st

Plate 3: Student from Rameshwar Vidyalay, Wing receiving 2nd prize

Plate 4: Student from Rameshwar Vidyalay, Wing receiving participation prize

Plate 5 : student from raireshwar vidyalay Titeghar receving participation prize

Fergusson College Visit

Date: 23rd August 2023

First Year Schedule

Time	Details	Responsibility
7 am	Leave Pune	Faculty of college
8.15 am	Reach Ajnuj	Faculty of college
8.15 to 8.45 am	Tea and Breakfast	NGCPR team
8.45 am to 11 am	Introduction to ecosystems- terrestrial and Aquatic ecosystem- grassland and Thorn forest ecosystem Faunal Diversity and indicator species	Dr Kranti Yardi Dr Erach Bharucha
11 am to 1pm	Concept of Ecotourism Activity on ecotourism issues	Dr Erach Bharucha Dr Kranti Yardi
1 to 2 pm	Lunch break	
2 pm to 2.30 pm	Visit to NGCPR, Shindewadi	NGCPR team
2.30 to 3.00 Pm	Visit to display center	Dr Kranti Yardi
3.00 to 4 Pm	Visit to NGCPR garden and nursery	Raviraj Rainak, Radhika Jagtap
4 pm to 4.30pm	Tea Break	Radhika Jagtap
4.30 pm	Leave for Pune and reach at 6 Pm	

Second Year Schedule

Time	Details	Responsibility
7 am	Leave Pune	Faculty
8.15 am	Reach NGCPR	faculty
8.15 to 8.45 am	Tea and Breakfast	Rohit Kumbhar, Radhika Jagtap
9 am to 9.30 am	Visit to NGCPR, Shindewadi, Center and lab facility , instruments and seed germination experiments	Dr Sagar Datir, Rohit Kumbhar, Radhika Jagtap
9.30 am to 11 am	Nursery/ Garden visit- types of plant nurseries like fernery, orchidarium, endemic plant nursery, endemic and endangered plants of Western Ghats	Dr Sagar Datir, Rohit Kumbhar, Radhika Jagtap
11 am to 1 pm	Visit to Ajnuj by bus and visit to Devrai for line transect	Dr. Sagar Datir, Rohit Kumbhar, Radhika Jagtap
1 to 2 pm	Lunch break	
2 pm to 3.30 pm	Belt transect and quadrates for grassland analysis	Dr. Sagar Datir, Rohit Kumbhar, Radhika Jagtap NGCPR team
3.30pm to 4 pm	Question answer session	Dr. Sagar Datir
4 Pm to 4.15 Pm	Tea Break	Radhika Jagtap
4.30 pm	Leave for Pune and reach at 6 pm	

23rd August Visit of Fergusson College

Students of FY an SY had come to Visit Ajnuj and NGCPR as a part of their Course.

First year and Second Year students of Fergusson College had come to visit Ajnuj Grassland and vegetation for their practical.

Dr. Kranti along with Radhika and Raviraj took in charge of First year students and Dr. Sagar and Rohit took in charge for Second year students.

First year students along with Priti Aphale Ma'am and Rupali Ma'am arrived at Ajnuj at 8:45am whileSecond year students along with Shraddha Ma'am and Amir Sir arrived at NGCPR.

Dr. Kranti headed the nature trail for FY students to the nature trail zone of NGCPR Ajnuj Farm. Dr. Bhrucha asked students to note whatever they feel important while observing the nature during the trail. She spoke to the students about different types of ecosystems that exist in Western Ghats and their importance to conserve those systems for ecological balance. Concepts of keystone species, indication species and their dependency with examples was explained. Students observed various birdson the trail, spotted nests and had discussion to why birds prefer certain materials and certain habitat with Dr. Kranti

Plate 1: First year students with faculty and NGCPR team at Nursery, Shirwal

Plate 2: 1st year students presenting their topic given as an ecotourism activity by Dr. Bharucha.Nursery, Shirwal

Dr. Bharucha rightly explained concepts of ecotourism in India and its significance on biodiversity inhabiting the area. He explained the importance conservation of natural resources, environment education, cultural preservation, local economic benefits etc. He briefed upon the restoration of the sites and their habitat for restoring the species. To the end of this session, Students were asked to setupan ecotourism site and come up with ideas for effective awareness programs while visit on the site.

After Lunch, all five groups presented their poster and explained the ideas and their advantages. This session was judged by Dr. Bharucha, Dr. Kranti, and their teachers as well.

Students of first year the headed to NGCPR for lab visit and nursery visit. Dr. Sagar explained them the importance of herbarium and specimens that are displayed in the

Interpretation Center and provided information about NGCPR's contribution to conservation. Information on seed collection, germination

and conservation measures were explained. Later, visit to nursery and plantation took place under the guidance of Mr. Raviraj and Dr. Kranti. Students along with teachers had tea and snacks and they leftfor Pune.

Second year students were headed by Dr. Sagar Datir and Rohit Kumbhar first at NGCPR for lab andnursery visit. Here they were first given introduction of NGCPR and their objectives. Dr. Datir also explained them the specimens displayed in the interpretation center and herbarium as well. They were then taken to the lab to know more about the instruments and experiments that are performed onthe seeds for germination and their expected growth.

Mr. Rohit guided the nursery tour for all students starting with Nakshatravan, Coconut plantations, fernery, endangered plant species, endemic species, orchid nursery and medicinal nursery. They werealso taken to the stand board to get some more information on various research done at NGCPR. Students were amazed to see the aquatic ecosystem around the Haldi plantation.

Later second year students were taken to Ajnuj farm for their practical. Devrai concept was introduced to them and they carried out their line transect method of assessment of species at this Devrai. At the chikoo farm, Students performed Quadrate method of assessment of species.

Towards the end of practical, Dr. Amir concluded with a vote of thanks.

Plate 3: Students discussing and preparing for presentation

Plate 4: 2na year students with faculty and NGCPR team at Ajnuj Devrai

Plate 5: Dr. Kranti taking 1st year students on trail at Ajnuj farm

Plate 6: Dr. Kranti teaching students about the importance of Ecotourism and how it works

Plate 7: Dr. Sagar explaining students of 1st year about the concept of Nakshatravan

Plate 8: Dr. Datir teaching students about herbarium, seed germination processes and different specimens displayed in the interpretation center

Rakhi Workshop in New English Medium School, Bhor

Date: 28rd August 2023

Rakhi Workshop

Rakhi, also known as Raksha Bandhan, is a significant Hindu festival celebrated in India and by people of Indian origin around the world. Mrunal Kale and her team from Bamboo are experts in making this eco-friendly rakhis. We identified Vidyapratisthan New English School, Bhor students and always encouraged to promote environment awareness by their teachers and decided to conduct a workshop for this school.

Principal of this School welcomed NGCPR team and Bamboo Tales experts. She introduced all to the students and gave information on reason of celebration of Rakhi. Ms. Mrunal Kale from Bamboo Tales gave a presentation on Bamboo's importance in India, its advantages, its usage, etc. She also showed students different artefacts that can be prepared using a bamboo and how sustainable idea this can be. Students were amazed by the ideas that were presented. They asked many question and were curious to attend the workshop.

Everybody headed to the workshop. Group of 2 student each were clubbed and they were asked to work in team and prepare rakhi as many they can. Team of Bamboo Tales part by part demonstrated the audience and students started preparing the parts of Rakhi. Students thoroughly enjoyed the process of preparing the material for rakhi. NGCPR team and Bamboo tales team were completely engrossed in the workshop and helping out the students in the step by step process. Students prepared beautiful rakhis and were excited to tie or get tied by their siblings. 3 students came forward and greeted the vote of thanks to the team of NGCPR and Bamboo tales for conducting this amazing workshop.

Principal Madam was surprised by the response that this workshop has given. Students seemed to be happy and satisfied to have learned an eco-friendly rakhi.

Plate 1: Ms. Mrunal Kale presenting the information about importance of Bamboo

Plate 2: Welcome at Vidyaprastisthan New English School, Bhor

Bamboo Tales team was overwhelmed by the response that this school students gave.

Plate 3: Students preparing their Rakhi

Plate 4: Students engrossed in the workshop of preparing eco-friendly Rakhis

Plate 5: Student showing their Rakhis

Plate 6: Students displaying rakhis that they have prepared

Plate 7: Students displaying rakhis that they have prepared

Eco-Friendly Ganesh Decoration Competition

Schools of: Bhor and Khandala region
Date: 19 September to 26 September 2023

Sr. no	School Name	Standard
1	Panchakroshi mahavidyalay, Loham-jawale	8^{th}, 9^{th}, 10^{th}
2	Zilla parishad school, Pisaware	7^{th}, 8^{th}, 9^{th}, 10^{th}
3	Zilla parishad school, Karnawadi	5^{th} ,6^{th}
4	K.S.P. vidyalay Naigaon	7^{th}, 8^{th}, 9^{th}, 10^{th}
5	Vidyapratishtan bhor English medium school, Bhor	8^{th}, 9^{th}, 10^{th}
6	Dyansanvardhani highschool, Atit	8^{th}, 9^{th}, 10^{th}
7	Shri Samartha Vidyalay, Kanheri	7^{th}, 8^{th}, 9^{th},10^{th}

Background Information

The Eco-Friendly Ganesh Decoration Competition held on 19 to 26 September 2023 at various schools in Bhor and Khandala. It was organized by Naoroji Godrej Centre for Plant Research, Shirwal. The competition was held to share creative ideas of sustainable and ecofriendly decoration and also to bring about eco-consciousness. Session was taken by Mr. Raviraj Rainak in six school whereas in other schools the competition was announced by their teachers. Total 12 schools students participated in the program. This report provides an overview of the event, its objectives, participants, judging criteria, and the winners.

Introduction: Ganesh Chaturthi is one of India's most celebrated festivals, where Lord Ganesha is revered with great enthusiasm. However, the traditional practice of immersing plaster-of-paris (PoP) idols in water bodies during the festival has raised concerns about environmental pollution. To address this issue, eco-friendly Ganesh decorations have gained popularity, emphasizing sustainable materials and practices.

Objectives of the Competition

The primary objectives of the Eco-Friendly Ganesh Decoration Competition were

- To promote eco-friendly practices during the Ganesh Chaturthi festival.
- To encourage the use of biodegradable and sustainable materials in idol making and decorations.
- To foster creativity and artistic expression within an eco-conscious framework.

- To raise awareness about the environmental impact of traditional idol immersion.

Participants

The competition attracted a diverse range of school students including from standard 5^{th} to 10^{th} of Rural and Urban schools. Participants were required to create eco-friendly Ganesh idols and decorations using environmentally sustainable materials such as clay, paper mache, and natural dyes.

Judging Criteria

The entries were judged based on the following criteria:

- Creativity and Aesthetics: The uniqueness of the design and overall visual appeal.
- Use of Eco-Friendly Materials: The extent to which sustainable materials were used.
- Environmental Impact: The consideration of the environmental impact during immersion.
- Innovation: Innovative and inventive use of materials or techniques.
- Message Conveyance: The ability to convey a message of environmental awareness.

Competition Highlights

- The competition featured a wide array of eco-friendly Ganesh idols and decorations, each demonstrating a commitment to sustainability and artistic flair. Some of the notable highlights of the event included:
- Diverse designs ranging from traditional to contemporary.
- Innovative use of recycled materials in decorations.

Winners

After careful deliberation by the panel of judges, the following winners were announced in different categories:

1st Prize:

2nd Prize:

Each winner received a certificate of recognition, along with prizes such as gift .

Conclusion

The Eco-Friendly Ganesh Decoration Competition was a resounding success in promoting sustainability, creativity, and awareness during the Ganesh Chaturthi festival. It provided a platform for individuals and communities to celebrate their cultural heritage while contributing to the preservation of the environment. The event demonstrated that eco-friendliness and artistic expression can coexist harmoniously, inspiring others to adopt eco-conscious practices in their festivities.

As we continue to address environmental concerns, initiatives like these play a

pivotal role in promoting a more sustainable future for our communities and the planet as a whole. The competition serves as an exemplary model for celebrating cultural traditions in an environmentally responsible manner.

Photographs of the sessions conducted in various schools

Winners

1st Prize

नाव - आयुष संतोष गोळे
शाळेचे नाव - श्री समर्थ
विद्यामंदिर,कण्हेरी
पत्ता - मु.पो - कण्हेरी ता - खंडाळा
जि - सातारा
संपर्क क्रमांक -
९९२३९३५००३/९०४९४२८३०४
सामग्री - २ पाट्या,मोठा पांढरा
कागद, नारळाच्या शेंड्या,रद्दी पेपर

2nd Prize
नाव: राऊत दत्तात्रय दौलत
पत्ता मुक्काम पोस्ट, लोहोम तालुका,
खंडाळा जिल्हा, सातारा
शाळेचे नाव पंचक्रोशी विद्यालय
जवळे लोहोम फाटा
वापरलेले साहित्य . कापूस , कागद,
पुट्टे, कापड, कागदी कप

3rd Prize
कु.वेदिका खापटे
माध्यमिक विद्यालय पिसावरे

Session on Climate Change

Date: 08th October 2023

Plate 1: Ms. Radhika conducting session on Climate change to 250 students of Class 8th

Venue: Delhi Public School, Pune

Ms. Savita escorted the NGCPR team to the multipurpose hall where 250 students of 8th Class were seated. Ms. Radhika then started the session on Climate Change. She asked students about the basic concept of weather and climate, greenhouse effect and greenhouse gases. Later she spoke about Paris agreement and Sustainable Development Goals (SDG's). Students were keenly listening about different SDGs and their contribution to overall development of human life. Carbon footprint and carbon handprint concepts were introduced to them hence the methods of adapting the climate change were given as well. Solution, Adaptation and Mitigation were the focused methods that a human can do today in their busy schedule were imbibed in them. Few students actively interacted in whole sessions and answered various concepts that they have learnt. Teachers encouraged the students to give answers and encouraged their confidence.

Later half was planned for planting medicinal trees in their medicinal garden. Principal and teachers motivated students to understand variability in the medicinal, endemic, indigenous and exotic trees. NGCPR team and students had discussions on all the medicinal plants that were provided. They talked about its uses, benefits and their availability in India.

Different Plants that were planted in DPS

Sr.no	Plants	Scientific Name
1	Lemon grass	*Cymbopogon citratus*
2	Curry leaves/Kadipatta	*Murraya koenigii*
3	Shatavari	*Asparagus racemosus*
4	Bryophyllum/ Panfuti	*Bryophyllum pinnatum*
5	Long pepper/ Pipli	*Piper longum*
6	Ajwain/ Ova	*Trachyspermum ammi*
7	Black dhatura/ kala Dhotra	*Datura Stramonium*
8	Wekhund/ Sweet flag	*Acorus calamus*
9	Adhulsa	*Justicia adhatoda*
10	betle leaves	*Piper betle*
11	Ram tulas	*Ocimum gratissimum*
12	Dumvel	*Tylophora Indica*
13	Aloevera	*Aloe barbadensis miller*
14	Dongri davana	*Artemisia pallens*
15	Haadjodi	*Cissus quadrangularis*
16	Sadaphuli	*Catharanthus roseus*
17	Vaala/Vetiver	*Chrysopogon zizanioides*

Plate 2: Students asnwering the concepts definition that they know

Plate 3: Studentsof 8th planting medicinal tree sapling provided by NGCPR along with Principal, Teachers and NGCPR team

Plate 4: Mr. Rohit addressing the information about various saplings to students, teachers and Principal

Visit to reCharkha Workshop

Date: 14th October 2023

ReCharkha EcoSocial is an initiative born of a desire to improve the face of our priceless natural surroundings, society, culture, and heritage.
reCharkha EcoSocial is a Social Enterprise founded on the belief that bottom-up development can only be sustainable! This means that sustainable development is only achievable if it starts at the ground level and involves an empathic understanding of the other biotic and abiotic communities. Their vision is to rise towards EcoSocial Development and mission is to upcycle the waste to conserve the environment, enable rural livelihoods and create aware of this planet. Their current focus is on waste management, specifically the non-biodegradable and difficult-to-recycle Waste Plastic. Furthermore, their initiative employs Tribal Women and Youth to provide them with craft-based livelihood opportunities.
Their UPCYCLING waste plastic into beautiful handcrafted fabric initiative employs the Indian traditional CHARKHA and HANDLOOM, keeping the process entirely manual. The fabric is used in the production of consumer goods such as handbags, fashion accessories, office supplies, and home decor items.
Workshop: Ms. Radhika, Mr. RAviraj and Mr. Rohit from NGCPR attended the workshop of reCharkha to understand upcycling and its amplifying demand and need in market.
First session was at Bhor Unit where segregation, washing drying and making of sheets take place. Total 14 participants joined the workshop which included students, small entrepreneurs and IT employees. Ms. Amita Deshpande, Founder of reCharkha briefed us about her journey of this startup. All participants introduced themselves and their interest towards attending the workshop.
Later all participants were involved in all processes that take place at the unit. Fisrt step that all learnt was to segregate the plastic waste depending upon its type. Plastic bags, transparent plastic, wrappers with silver lining, wrappers without silver lining and amazon parcel bags were various groups that all separated in. This plastic waste comes from all over India. Then second step was to clean them with water and soap. Third was to separate them according to the item that has to be prepared out of it. Fourth was to cut the plastic as long strings and attached them by sealing machine. Later all strings are then rolled on a roller and last step was to use it in the handloom to make a woven fabric sheet. Production of these sheets take place at this unit itself later, they are transported to Pune Unit for tailoring and last finishes. They also have Unit at Dadra and Nagar Haveli and a store at Mumbai.

They get tonnes of plastic waste and they prepare these beautiful bags made from plastic. They are not involve in processes and machines that take a lot of energy but are involved in providing rural- cultural based employment practices for rural people especially women. Currently 55 employee team is working under reCharkha. Later we took and tour of EcoSocial village setup of this Bhor Unit in 1 acre area which comprised of plantation of indigenous variety of plants, bamboo house, waste glass bottle used for construction of the unit as well as washroom, natural waste water filtration system.

Second session was at their Pune unit to look around their tailoring techniques and designing the products. They have a store at this unit which involves innovative ideas for our daily used products. From bags, home décor to travelling essentials. All participants were impressed by the ideas however shocked and distress by the generation of plastic waste that is done by us. This visit surely has hanged the mind-set towards environment and change the impact that plastic has on humans. It's high time that we change our practices to sustainable lifestyle.

Plate 1: Participants segregating waste and Ms.Amita guiding for the same

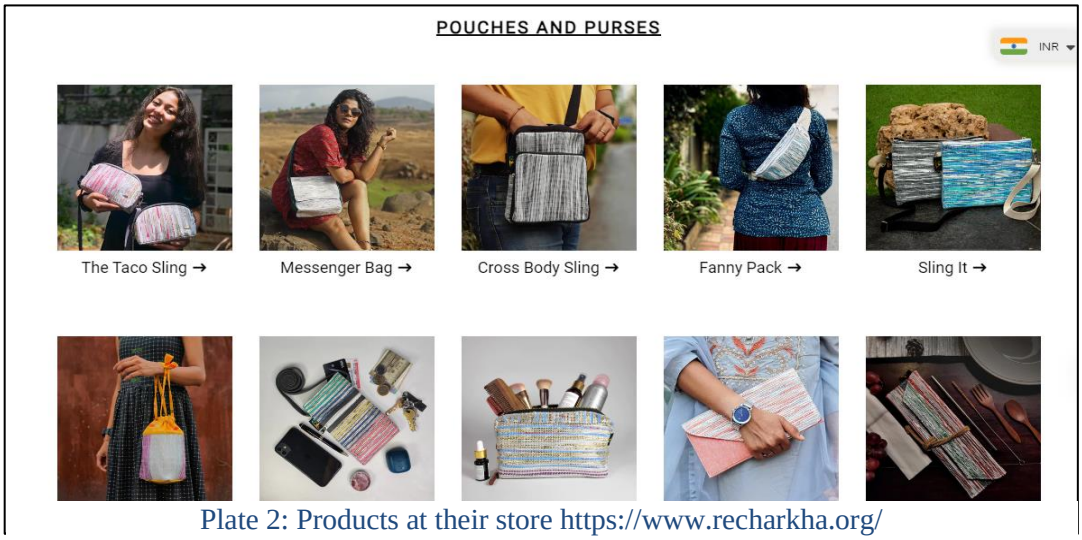


Plate 2: Products at their store https://www.recharkha.org/

Plate 3: Group picture of all paricipants with Founder, Ms. Amita in the surrounding of the Bhor Unit

Plate 4: Plastic woven sheets of various designs

Plate 5: Group picture with Co-Founder Mr. Abhishekh and the products of recharkha at the backend

Session on Scope of Botany in Industrial Area and Plantation drive

Date: 18th - 20th October 2023

In Balwant College Vita, a session was held on the topic of Importance of botany and in Industrial sector. Students of BSc Part I, II and III of Botany Department were present for the session.

The program started with the Introduction of NGCPR. Information about the programs that are conducted through FDCM were given. Mr. Rohit also addressed about the activities, sessions and workshops that are conducted for various age group of people including school college students, farmers, women self-help groups etc. The students were informed about the tree plantation done under the programme. Cultivation of Nakshatravan and Ayurvedic plants and its daily use were told.

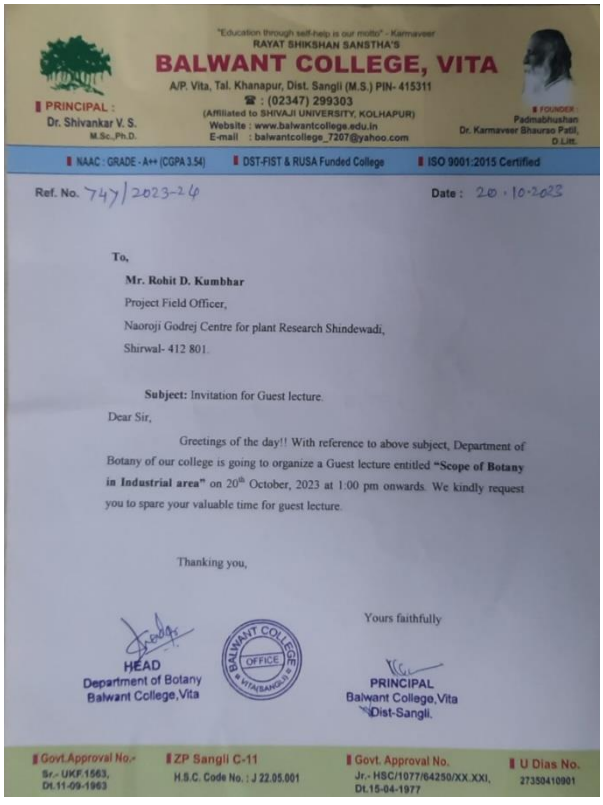
Presentation also addressed the theme 'Importance of Botany in Industrial Sector'. The students were guided on ways to get government jobs in the field of Botany, job opportunities in corporate research institutions and various ways and ideas to start their own business related to sustainable, environment & conservation and consultancy etc. Students were informed about preferences that are given while searching for various posts recruitment. They were also informed about government exams and their post related to their field such as Forest department (IFS ACF, RFO). Knowledge about opportunities of PhD, lectureship, teacher or a scientist were shared to the audience.

Ideas were given for starting their own business. One can set up their own business by making bonsai using nursery and bonsai techniques. Making handicrafts out of bamboo or other fiber products, using marketing strategy and selling them in market were explained to them. Based on the concept of sustainable development, many schemes are implemented by the government to produce various environmentally friendly products. It can create new business concepts. Internship opportunities in government projects related to environment, botany and sustainability were informed. Recruitement in MPCB and CPCB boards were also explained.

On the occasion of this program, Head of Department of Botany Dr. S. Shendge and teachers were also present. They encouraged students to follow the steps given by Mr. Rohit to achieve their goals. Students were attentive and asked very important questions at the end of the session. They were eager to know Mr.Rohit’s journey to NGCPR. Mr. Rohit addressed each question with enough knowledge and students were satisfied with the answers. Dr. Shendge presented the vote of thanks and appreciation to Mr. Rohit for this requested Guest lecture.

Plate 1: Mr. Rohit addressing students on 'Scope of Botany in Industrial Area'

Plate 2: Students keenly listening to Mr. Rohit information



"Education through self-help is our motto" - Karmaveer
RAYAT SHIKSHAN SANSTHA'S
BALWANT COLLEGE, VITA
A/P. Vita, Tal. Khanapur, Dist. Sangli (M.S.) PIN- 415311
☎ : (02347) 299303
(Affiliated to SHIVAJI UNIVERSITY, KOLHAPUR)
Website : www.balwantcollege.edu.in
E-mail : balwantcollege_7207@yahoo.com

PRINCIPAL : Dr. Shivankar V. S. M.Sc.,Ph.D.
FOUNDER : Padmabhushan Dr. Karmaveer Bhaurao Patil, D.Litt.

NAAC : GRADE - A++ (CGPA 3.54) | DST-FIST & RUSA Funded College | ISO 9001:2015 Certified

Ref. No. 747/2023-24 Date : 20.10.2023

To,
Mr. Rohit D. Kumbhar
Project Field Officer,
Naoroji Godrej Centre for plant Research Shindewadi,
Shirwal- 412 801.

Subject: Invitation for Guest lecture.

Dear Sir,

Greetings of the day!! With reference to above subject, Department of Botany of our college is going to organize a Guest lecture entitled **"Scope of Botany in Industrial area"** on 20th October, 2023 at 1:00 pm onwards. We kindly request you to spare your valuable time for guest lecture.

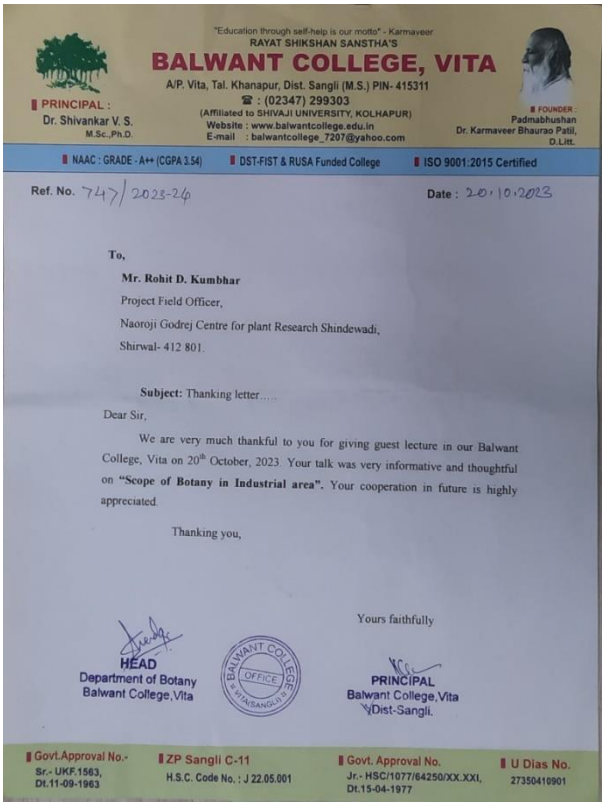
Thanking you,

Yours faithfully

HEAD
Department of Botany
Balwant College,Vita

PRINCIPAL
Balwant College,Vita
Dist-Sangli.

Govt.Approval No.- Sr.- UKF.1563, Dt.11-09-1963 | ZP Sangli C-11 H.S.C. Code No. : J 22.05.001 | Govt. Approval No. Jr.- HSC/1077/64250/XX.XXI, Dt.15-04-1977 | U Dias No. 27350410901



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Ref. No. 747/2023-24 Date : 20.10.2023

To,
Mr. Rohit D. Kumbhar
Project Field Officer,
Naoroji Godrej Centre for plant Research Shindewadi,
Shirwal- 412 801.

Subject: Thanking letter.....

Dear Sir,

We are very much thankful to you for giving guest lecture in our Balwant College, Vita on 20th October, 2023. Your talk was very informative and thoughtful on **"Scope of Botany in Industrial area".** Your cooperation in future is highly appreciated.

Thanking you,

Yours faithfully

HEAD
Department of Botany
Balwant College,Vita

PRINCIPAL
Balwant College,Vita
Dist-Sangli.

Govt.Approval No.- Sr.- UKF.1563, Dt.11-09-1963 | ZP Sangli C-11 H.S.C. Code No. : J 22.05.001 | Govt. Approval No. Jr.- HSC/1077/64250/XX.XXI, Dt.15-04-1977 | U Dias No. 27350410901

Shrinath Vidyamandir, Alasand

School Background:
Region: Moderate rainfall region
School Area: 2.5 acre
Water availability: Moderate availability
Total Plants given & planted: 100

Plantation Drive by NGCPR					
School/College NAME:	Shrinath Vidyamandir, Alasand				
Date of Plantation:	18-10-2023				
Plants	Count	Plants	Count	Plants	Count
Madhumalti double	2	Adulsa	5	Bhokar	2
Ananta	2	Kala dhotra	2	Sita ashok	2
Ioxra	2	Bel	2	Bahava	2
Pashan bhed	2	Bibba	2	Bakul	2
Parijatak	2	Shatavari	4	Palas	2
Jai	2	Aloevera	2	Arjun	1
Jui	2	Awla	1	Kadamb	2
Kamini	2	Ramtulas	2	Kaatesawar	1
Putranjiwa	1	Lendi pimpli	2	Hadga	1
Tamhan	2	Dongri davna	4	Undi	2
Bhed umbar	1	Murudsheng	1	Buch	1
Barleria	10	Kali nirgudi	4	Nandrukh	1
Shami	1	nirgudi	4	Kumbha	1
Khair	1	kapur	1	Kinjal	1
Pimpal	1	Lal adhulsa	2	Moha	1
Damvel	2	Reetha	1		
Gunj	4	Rui	2		
TOTAL = 100					

DAY 1

- **<u>Plantation of Nakshatra Vân and Ayurvedic plants.</u>**

Plantation drive took place on 18th October 2023 of Nakshatra Van and Ayurvedic plants at Shrinath Vidyamandir, Alsand by Naoroji Godrej Center for Plant Research, Shirwal. This activity was carried out with the aim to preserve and aware students and teachers about indigenous tree varieties and their

importance. Firstly, preliminary inspection of the site was done. The land is dry and rocky and the place was full of rodents and bushes. With the help of the students, the land was cleaned and the plan for the Nakshatra van was prepared. The places where the trees were to be planted were marked with white color. Pits were dug out by the students of 9th and 10th standard and workers of Gram Panchayat as well. As the land is rocky, soil and dung were filled in the pit in order to protect the trees of the Nakshatravan. It was planned to plant a mulberry tree as a fence to the garden. For planting ayurvedic plants, a black soil plot of 10 x 12 was selected and cleaned. It was taken from pits at different distances.

DAY 2

On 19th October 2023 at 8.30 am, tree plantation was started by school students, teachers, Gram Panchayat Sarpanch, Gram Panchayat members and workers. Mr. Rohit Kumbhar Project Officer (FDCM) explained the concept of Nakshatra van to everyone. He guided about the concept of Nakshatra van and its importance. For this, the book Nakshatra van written by Subhash Badve (IFS) was taken as basis. The concept of Nakshatra van has been presented in this book by studying information from mythological texts and Vedas.

Gram Panchayat Sarpanch Shri. Abhinandan Jadhav started the tree plantation by planting a sapling of Peepal tree. Later, Nakshatravana tree plantation was done through school principal and gram panchayat members as well as students and teachers of the school.

A medicinal garden was created outside the school office. Shatavari, Kaladhotra, Red Adulsa plants were planted in this. Along with this, various flowers and various indigenous trees were also planted in the school premises. On this occasion, Sarpanch Mr. Abhinandan Jadhav, Deputy Sarpanch Mr. Poptrao Barbatte, all members as well as Chairman of School Management Committee Mr. Avinash Jadhav, Center Head of Aalsand Center Mr. Dilip Kumar Sanap Saheb, Principal Mr. Kongole S.D, all the teachers and non-teaching staff of the school were present.

आळसंद विद्यालयात वृक्ष लागवड

कोळे/प्रतिनिधी:

स्वामी विवेकानंद शिक्षण संस्था संचलित श्रीनाथ विद्यामंदिर आळसंद येथे आज एक आगळावेगळा उपक्रम राबवण्यात आला.

सांगली जिल्ह्यामध्ये कोणत्याही माध्यमिक शाळेमध्ये नाही अशा प्रकारचे नक्षत्र गार्डन आणि बॉटनिकल गार्डन ही संकल्पना विद्यालयाचे माजी विद्यार्थी विशाल कुंभार आणि रोहित कुंभार यांच्या नाविन्यपूर्ण कल्पकतेतून साकार करण्यात आली. नौरोजी गोदरेज प्लांट रिसर्च सेंटर यांच्या विद्यमाने वेगवेगळ्या वनस्पतींची वृक्षांची लागवड शाळेच्या परिसरामध्ये करण्यात आली.

सदर वृक्षारोपण कार्यक्रमावेळी सरपंच अभिनंदन जाधव उपसरपंच पोपटराव बारबट्टे सर्व सदस्य तसेच शाळा व्यवस्थापन समितीचे अध्यक्ष अविनाश जाधव, आळसंद केंद्राचे केंद्रप्रमुख दिलीपकुमार सानप साहेब मुख्याध्यापक कोगनोळे एस डी विद्यालयाचे सर्व शिक्षक व शिक्षकेतर कर्मचारी उपस्थित होते. तरुण पिढीच्या कुशाग्र बुद्धीतून निघालेल्या या नावीन्यपूर्ण आणि पर्यावरण पूरक उपक्रमाचे सर्व मान्यवरांच्या कडून कौतुक केले जात आहे.

Plate 3: Mr. Rohit carried out plantation drive at Srinath Vidyamandir, Aalsand along with students of 9th and 10th standard and teachers.

Plate 4: Students planting tree saplings.

Godrej communication Team Photography event

Date: 4th November 2023

Godrej's Photography Workshop

Godrej Communication team from Vikhroli visited NGCPR with 27 participants who had won different competitions conducted by them. It was accompanied by an expert Wildlife photographer Ms. Aishwarya Shridhar who guided them to take best possible pictures using a cellphone.

Ms. Aishwarya Sridhar is an Indian wildlife photographer, wildlife presenter, and documentary filmmaker residing in Navi Mumbai. She is the youngest girl to have won the Sanctuary Asia- Young Naturalist Award and the International Camera Fair. Award. In 2020, Aishwarya became the first Indian woman to win Wildlife Photographer of the Year award. She is also a member of the State Wetland Identification Committee appointed by the Bombay High Court. Her works have been featured in BBC Wildlife, The Guardian, Sanctuary Asia, Saevus, Hindustan Times, Mumbai Mirror, Digital Camera, Mathrubhumi and Mongabay.

Aishwarya Sridhar gave photography lessons to the participants.

First they visited Ajnuj and later NGCPR. Dr. Kranti took them on a nature trail and showed various different types of ecosystems, tree species and birds present at Ajnuj. Aishwarya Sridhar gave photography lessons to the participants.

Later, they visited NGCPR lab at Shirwal. Dr Sagar Datir explained them about the seedbank and herbarium. Tour to nursery was then taken by Mr. Rohit, explaining different kinds of nursery and Nakshatravan.

Participant, while studying the wetland system

Participants enjoying the natural hide-out

Teacher Training Workshop: 3

Date – 6th December 2023

Sr. no	Timing	Activity
1	9:15 to 9:30 am	Registration
2	9:30 to 10:00 am	Tea & snacks
3	10: 00 to 10:30 am	Introduction by Dr. Bharucha
4	10:30 to 10:45 am	Group activity
5	10:45 to 11:30 am	Presentation on climate change
6	11:30 to 11:45 am	Energizers
7	11:45 to 12:30pm	Concept of footprint handprint
8	12:30 to 1:00 pm	Lunch
9	1:00 to 2:00 pm	Project discussion
10	2:00 to 3:00 pm	Price distribution
11	3:00 to 3:30 pm	Tea & snacks

Teacher training workshop was organized at Ajnuj Activity centre in Ajnuj on 6th December 2023.

Workshop was organised for the teachers to address information about climate change, its impact on life and also how to conduct a project along with students on this topic with the help of elders in the family and locals in surrounding. Workshop started at 10.am. Program introduction was addressed by Dr. Kranti while brief information about the activities and objectives of this workshop was given by Dr. Bharucha

Miss. Radhika Explaining Climate change

Presentation on Climate change was given by Ms. Radhika, she explained that definition of climate and weather also difference between these concepts. She also explained greenhouse effect on earth and types of greenhouse gases present in the atmosphere, its significant percentage and its time span in atmosphere which was alarming. She explained the sources of greenhouse gases its effects, reasons for the damage caused.

Ms. Radhika also explained Paris Agreement, and history behind formation of The United Nations 17 Sustainable Development Goals called as 'The SDGs'. They were created in 2015 with the aim of "peace and prosperity for people and the planet, now and into the future. SDGs emphasize the interconnected environmental, social and economic aspects of sustainable development by putting sustainability at their centre. She mentioned about solution, adaptation and mitigation measures that can be done on individual level, which in turns contributes to nation wide movement.

Group activity: Teachers were asked to form a group of four. Each group was given one topic such as Grassland, wetland,

Each group were supposed to explain a poster. They explained climate change effect on agriculture crop field. Changes in crop pattern were seen in local area from few years. Teacher said that 10 years ago, local people used to grow millets crops but now, they are turn to cash crop like sugarcanes. This drastic change seen by the teachers was scary, they said. Teachers along with NGCPR team had a discussion on solutions, adaptations and mitigation measures that are now need of an hour.

Dr. Kranti yardi explaining Footprint and Handprint

Session on footprint handprint concept

Dr. Kranti Yardi took a session on the concept of footprint and handprint. She explained, where a footprint evaluates your activities that contribute to global warming, your handprint evaluates your actions that help reduce climate change beyond your own value chain. Handprints are changes to environmental and social impacts that we cause outside of our footprints. She also taught how to calculate handprint and footprint, gave the solution to reduce footprint and how to increase handprint

Project discussion:

Mr. Rohit Kumbhar took a session

on how to conduct a project. Main objective of project was to collection of data and identification of the material. Aiming for students to learn methods for data collection, writing and compiling the data in a manner to present it before the experts. It helps them to use this knowledge in regular life and imbibe skills to work on any topic further in their lives. He explained the methods used for data collection and structural format for writing the project and its submission. Methods such as interviewing surrounding people asking, them all same question with their own answers. This initiates a conversation between students with their parents and grandparents as well as elders in their surrounding that help collect information which has been passed down from years. This activity enhances students' interest in the traditions as well as increases their knowledge about the topic. He explained the significant impact that students have when they participate in such projects. He also mentioned that if a certain topic is rare or not much spoken about, we can have detail research on it and later can publish a paper if not found on google database. This aim of the project elevated teacher's enthusiasm to participate in this competition. After the importance of the project, he explained each topic and its relevant method for data collection.

Topic names

1. Medicinal plants
2. Veterinary Medicinals plant
3. Wild vegetables
4. Non timber forest products
5. Traditional knowledge and food

Teachers were asked to choose minimum 1 topic each, follow up on which would be taken 15 days later this workshop.

Prize distribution (Seed collection Competition)

In the last half, prize distribution for seed collection competition was carried out. From May to July, we had conducted a competition on collection of indigenous plants seed i.e. Seed collection competition. Students were asked to collect seeds from surroundings.

Rules for competition:

- Plant seed should be dry
- Seeds are indigenous/endangered
- Native name and some identification mark.

- Teachers were allowed to help student, to identify plant name or etc.

During this competition various different varieties of seeds were collected from students. 30 students from different schools participated in the competition. The competition winner students were Shivaraj Thombre from Shree Samartha Vidhyamandir Kanheri. Shivaraj collected about 32 various types of seeds with its local name (Hirda, ramphal, karanj, bibba, Abbai, Arjun, chandan etc) the bibba species holds endangered status as per IUCN. Second winner was from Rameshwar Vidhyalaya Wing and winner school was Raireshwar Madhyamik vidhyalaya Titeghar for collecting maximum seeds. All students and teachers gave great response to seed collection competition. Collected seed were treated by different chemical and water and sow in bag and the plants saplings are now available at NGCPR nursery. All these saplings will be planting in June 2024.

Vote of thanks

Dr. Kranti Yardi thanked all teachers for sincerely attending the session. She encouraged teachers to conduct a project in their respective schools and collect the information from students. She thanked NGCPR team and concluded the program.

Prize Distribution:


Prize Distribution of Competition

Honey-bee Farming Workshop

Date: 11th December 2023

Date: 11th December 2023

Beekeeping is an agricultural occupation. Bees convert nectar/pollen from flowers into honey and deposit it in their hives. Collecting honey from forests and other places is a very ancient tradition. Beekeeping is a profitable industry as the demand for organic honey has increased in the market. The natural wax produced from it is also economically profitable. Bee farming is done to increase the yield of crop as well as side source of income from honey and wax is generated.

On 11th December 2023, Honeybee farming Workshop was arranged for farmers of around areas. Mr Hemant Dumbre, a government certified honeybee farming expert had come to teach farmers about honey-bee-keeping, farming, and handling. Farmers from nearby villages gathered at Ajnuj. Women self-help groups of various villages were also present. Dr. Kranti introduced Mr. Dumbre and his ample work in this field. Mr. Dumbre started the workshop by his story to enter this field. Later he talked about significance, its importance to the crop field, increase in yield and other benefits of the business. Whereas, he later demonstrated the handling and sensitivity of their behaviour. Farmers had enormous questions pertaining to its adaptability, costing, conservation, business and market demand. Mr. Hemant was knowledgeable enough to answer the questions and addressed their doubts until clarified. He encouraged to arrange and conduct a Honeybee farming workshop, under which he teaches every details of apiculture farming.
Towards the end of the day, he also made all participants taste the honey that he has been preparing from this business and also made them taste pollen grains obtained from the honeybee keeping box.

Dr. Kranti addressed the vote of thanks, while many farmer participants also spoke a few words of appreciation towards Mr. Hemant and Dr. Kranti & Team for arranging this beneficial workshop.

Plate 2 Mr. Hemant explaining the significance to understand the process of honeybee farming

Plate 1 Dr. Kranti addressing the audience about Mr. Hemant's work and their expertise

Plate 3 Mr. Hemant explaining the handling of the box

Plate 4 Participants,NGCPR Team along with expert Mr. Hemant Dumbre

Mame Bonsai Training Workshop

Date: 21st December 2023

List of Participants

Sr.no	Name
1	Shweta Jagtap
2	Akshada Deshmane
3	Prajakta Kulkarni
4	Neeta Patil
5	Rasika Waghmare
6	Priyanka Kadam
7	Shailaja Kapila Ma'am & 2 others
8	Ruturaj Mohite

Schedule			
Sr.no	**Timings**	**Event name**	**Speaker**
1	9:00 am to 9:30 am	Breakfast and Tea	
2	9:30 am to 10:00 am	Introduction to Workshop	Dr. Erach Bharucha, Dr. Kranti Yardi, Ms. Shailaja
3	10:00 am to 10:30 am	Introduction to NGCPR	Dr. Sagar Datir
4	10:30 am to 11:30 am	Tour to NGCPR nursery and laboratory & Tea	
5	11:30 am to 12:30 pm	Presentation on Bonsai	Ms. Shailaja
6	12:30 pm to 1:30 pm	Demonstration	
7	01:30 pm to 2:00 pm	Lunch	
8	2:00 pm to 3:15 pm	Hand's on	
9	3:15 pm to 3:30 pm	Certificate distribution	
10	3:30 pm	Feedback assessment	

Date: 21st December 2023

Shailaja Kapila of 'Kapila Creations' was the expert present for this workshop. Ms. Shailaja is a professional bonsai artist. She has been working in this field for more than 20 years.

Dr. Kranti welcomed everybody to this workshop, introducing Ms. Shailaja Kapila, the expert, Dr. Bharucha and NGCPR team. She addressed the audience with the scope and business that bonsai have in today's date. All the trainees present, gave a brief introduction about themselves. Dr. Bharucha shared his own experience of having several kinds of bonsai plants that he prepared all by himself and have had for more than 25 years. He also shared his way of grooming and maintenance of different bonsai's with the audience.

Dr. Datir gave a brief about NGCPR, its objectives and work so far. While giving information about bonsai, Ms. Shailaja said that the art of bonsai originated in India and then spread to China and Japan. Chinese monks developed bonsai in monasteries as a spiritual practice to bring peace to Buddhism. 100-year-old bonsai can be found in Japan. Ms. Shailaja addressed that to make a bonsai, one has to select the plants in a certain way. One has to make a soil mixture that will drain the water properly.

Choosing the right container for planting bonsai is an essential element of the art. Bonsai pots are usually earthenware, with or without a colored outer glaze and may be round, oval, square, rectangular, octagonal, and may have one or more drainage holes in the bottom. Containers are carefully selected to harmonize the color and scale of the plant. If the container is rectangular or oval, the plant is planted in the center point or according to the spread of the branches. The plant is placed slightly off center in a square or round container. It is trimmed to the desired shape and tied with aluminum wire. Then on regular intervals, necessary changes are to be made.

Moss is added to the upper part, this creates a cooling effect on the bonsai and helps to create a green look. Stones of various sizes are also used to elevate the

plant. Various small artifacts can be added to make it look good.

All the trainees were given a selected plant, flat pot and other materials required for bonsai. Ms. Shailaja demonstrated the process of making a bonsai. Everyone started designing bonsai according to their preferences. Ms. Shailaja and her team were helping everyone wherever needed.

Bonsai can be a great business considering the growing demand for beautification. The workshop aimed to inculcate a professional attitude among the students and develop their skills. Through this art we can meet our financial needs and we can use this art as a side business. After the program, everyone expressed their opinion. Dr. Kranti thanked everyone for coming and actively participating in the workshop.

1 *Dr. Bharucha sharing experience of having Bonsais for 25 years*

2 Ms. Shailaja Kapila (expert) providing guidance to students

1 Participants enjoying their hands-on experience

2 NGCPR Team along with participants taking experience in Bonsai making

A session on grassland ecosystem

Date 23rd Dec 23023

The Forest Department of Maharashtra organized two sessions for Range Forest Officers. The main objective of the session was to provide information on grassland ecosystems, their biodiversity and threats in Maharashtra. There were 35 range forest officers present for that session. All the forest officers came from different districts of Maharashtra like Dhule Jalgaon, Satara, Vashem, Latur, Nandurbar, Jalna, Wardha, Hingoli, etc. Dr. Bharucha and Dr. Kranti Yardi took a session on grassland ecosystems.

Session: **Biogeographic region of India.**

Dr. Bharucha gave a session on the biogeographic region of India. He explained that 10 biogeographic regions are present in India. The Trans-Himalayan Region, Himalayan Zone, Indian Desert Zone, Semi-Arid Region, Western Ghats, Deccan Plateau, Gangetic Plain, North East Region, Coastal Region, and Islands are the ten recognisable biogeographic zones of India. Dr. Bharucha said India has a rich heritage of natural diversity, and he also explained the animal, which is an indicator of area and ecosystem. This gave an overview of India's biodiversity and need for conservation.

Session and activity: Grassland ecosystem.

Dr. Kranti Yardi did sessions and activities on sustainability. She explained that grasslands are one of the largest biomes on Earth and dominate the landscape worldwide. There are different types of grasslands: natural grasslands, semi-natural grasslands, and agricultural grasslands. Dr. Yardi explained what a

grassland area is, how animal and bird ecology are interconnected, and why we should conserve the grassland ecosystem. Madam, explain the government project that is related to grassland.

Plate 1: Forest range officers' participants in activity also explain the posters to Dr. Bharucha and Dr. Kranti Yardi

The activity was conducted on sustainability There are three major parts of an ecosystem: grassland ecosystem, wetland ecosystem, and forest ecosystem. All participants officers are divided into three groups. Each group gave one ecosystem and gave 15 minutes for discussion and making posters. Participants were asked to write down the issues of each ecosystem and then after 10 minutes were asked to write the solutions on the problems. After they explain the poster, they explained what can be done at their level animals, pollution, causes of ecosystem destruction, and what we can do for conservation. Sustainability activity was very much appreciated by the participants.

Vote of thanks

Mr. Khot thanked all participants for sincerely attending the session. He encouraged officers. He thanked Dr Bharucha, Dr. Kranti Yardi and concluded the program.

Anandmelava at Godrej Vikhroli

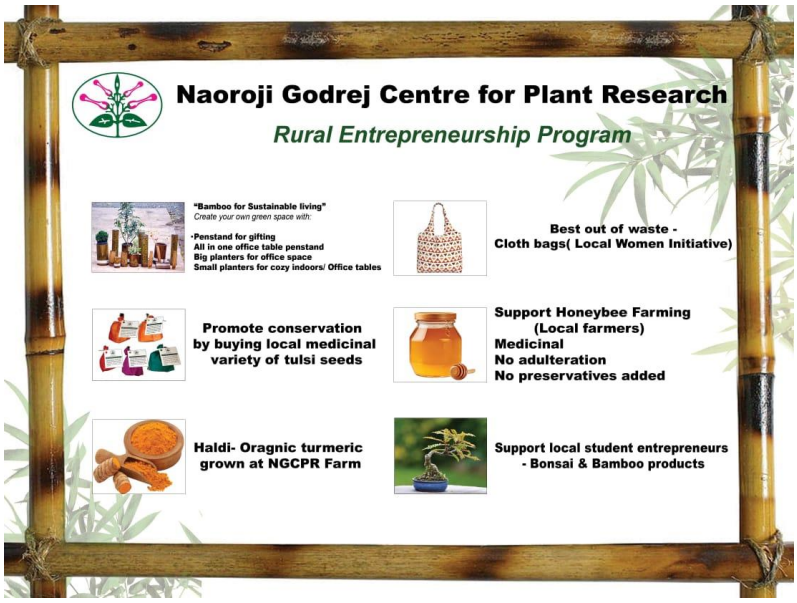
Date: 7th & 8th January 2024

NGCPR team arrived at the event location at 4:00pm on 7th January and unpacked all items and were ready with the display the products for sale.
Bamboo products such as table lamp, vases in 2 sizes, planters for plants in 2 sizes, key chains, pen stand, coffee mug, organic turmeric from Ajnuj farm, organic honey of different flavor's, cloth bags prepared by women self-help group, key holders made by entrepreneurs, different succulents, table plants, ferns, and bonsais etc.

There were many stalls all over the ground including Godrej's products and various eatables, as well as games for children such as merry-go-round, giant wheel, etc. Employees of all Godrej branches come here for this 'Mela' and all seems to be curious to what's new in this year's mela?

We were all set with products and the Mela started around 6:00pm, crowd started visiting different stalls. We also displayed NGCPR work and contribution to conservation on a standy that made public more aware of what we do and information of products were given to each visitor that visited our stall. Organic turmeric from Godrej's Ajnuj farm has always been an attraction, as it is used for all purpose, people are keen to buy over and over again; even to gift it to other relatives, friends and family.

People were mostly attracted to small planters, key chains. We had a huge sale on day 1 of the event. Day 2 was comparatively slow and low sale. People were curious to know more about the organization and were proud to know that Godrej has contributed to environment conservation to such an extent.



1. NGCPR team on the stall, showcasing their products

A visit to Ajnuj Farm-Environment enthusiast

Date: 21st January 2024

Everyone reached at destination at 8:30am. NGCPR team welcomed all guest. Dr. Kranti Yardi introduced NGCPR team.

Miss Radhika gave information about NGCPR, its aim, objectives, about the work that we do and then about the Ajnuj area, its climate, biodiversity, importance of this ecotone zone and the agricultural practices that are carried out here.

Mr. Rohit gave information about medicinal plants and our medicinal garden. He showed them all 5 types of Tulsi, its medical uses. He also showed other medicinal plant like sarpgandha, kala dotra, panfutti, damvel, adulsa, shatawari and some flowering plant like anant, Madhu malti, Kamini, tutti, Rui etc. He then took them to show the research field plot and gave information about Dioscorea. He conveyed the importance of organic farming, its health benefits and the way they need to be practiced. He took them to other farm cultivation like shevga, chikku, nariyal, sitafal, Sugarcane and haldi etc.

Figure 1 Group picture of NGCPR team with the nature enthusiast group

Figure 2 Nature enthusiast along theGrassland nature trail

Later we all had breakfast, all went to wetland nature trail. Water canal along the trail attracts huge diversity of water birds. Along the trail there are various types of plant species such as abutilon percicum, a huge sandal wood patch,

different types of bamboo, jamun, Shivan, nirgudi and ber also glyricidia patch, teak trees are present. Here along the trail, we also find different shrub species and few reptiles. During the trail, we incidentally saw kingfisher and cormorants aroundthe water canal. Dr. Kranti mentioned, presence of crake, quails, waterhen as well. Mr. Ajay gave information about wetlands ecosystem and related plants like Karanj. Also, he showed the shikekai, kavat, neem and maharukh, arjun, sagargota trees. He also mentioned their importance and their uses while speaking about them.

Figure 3 Nature enthusiast along the Trail

Then everyone proceeded to the grassland nature trail. The Grassland ecosystems has 5 types of grass species also some thorn acacia plant species are seen. In the Grassland, birds like scaly breasted munia, red munia, pond heron, egret, green beater, black kite were seen. Dr. Bharucha made us see a scat of chinkara. Then we went to Devrai. There were about 450 plants planted in Devrai. Various types of plants such as medicinal, endangered, indigenous category were planted based on Devrai Concept.

Later, all came to NGCPR campus to gain knowledge about techniques of seed germination, nursery and interpretation centre. Dr. Kranti took everybody to ‘Nakshatra Van’ and explained its significance in astrological study. Mr. Ajay then took all to interpretation centre and explained seed collection techniques, their preservation and the Herbarium- preservation of plants to study. Miss Radhika gave information about project FDCM- education awareness and entrepreneurship, which is given by department of Forest Corporation of Maharashtra. Under that project college

Figure 4 Humidity Chamber

students made bamboo artifacts from the available bamboo in NGCPR campus. Mr. Rohit explained different bamboo species present in the NGCPR campus and their particular use. Few environment enthusiasts bought bamboo planters, keychains and Tulsi seeds as well. Then all were taken to take a round around the nursery developed by NGCPR. Medicinal, aromatic, flowering, orchids, ferns, endangered plants and few fruit bearing plant species available at NGCPR made these enthusiasts surprised. They were then taken to humidity chamber where; Mr. Ajay explained the importance for carrying out experiments on plants for conservation. Everybody seemed happy and satisfied with the visit. Few had doubts and that were resolved by Dr. Kranti and Dr. Bharucha. These Nature Enthusiast thanked Dr. Kranti and Dr. Bharucha for bringing them here and providing the knowledge. They also thanks NGCPR team for actively presenting and explaining about the sites.

Poster Presentation Competition

Date: 14th February 2024

Schedule for Poster Presentation

Poster Presentation Competition		
Date:14 February 2024		
Sr. no	**Timing**	**Activity**
1	9:30 to 10:00	Registration
2	10:00 to 10:30	Breakfast
3	10:30 to 11:00	Inauguration
4	11:00 To 1:30	Poster Presentation Competition
5	1:30 to 2:30	Lunch
6	2:30 to 3:00	Vote of thanks

NGCPR Team

Dr. Kranti Yardi	Dr. Sagar Datir
Ms. Radhika Jagtap	Mr. Raviraj Rainak
Mr. Rohit Kumbhar	Mr. Pavan Kumatkar

	Judge 1	Judge 2
5th & 6th	Dr. Sagar Datir	Ms. Antara
7th, 8th & 9th	Dr. Archana Kalyani	Mrs. Kanheri

NGCPR team took the charge to ascot students from their residence to Ajnuj farm. Vehicles such as buses, cars were arranged according to total student count on each route. Everyone reached the location, 'Ajnuj Farm' at around 9:30 am. Guests and Judges also reached the location at 9:30.

Students were provided with healthy breakfast including pattice, milk and banana. Teachers and School Principals joined as well. Mr. Rohit was the host for the Program. Mr. Rohit started the program introducing Judges, NGCPR Team and with brief introduction about the work of NGCPR. Later, Dr. Kranti introduced all the Judges with their magnificent of work and their experience in this field of environment science. Dr. Archana Kallyani, Ms. Antara and Mrs. Kanheri were the profound judges for the event. Teachers were acknowledged with a jute bag as an effort they have taken for students to prepare for the competition.

5th and 6th student groups were then taken in the shady area of turmeric agricultural field, where Dr. Sagar and Ms. Antara were the Judges for students. While Ms. Archana and Mrs. Kanheri were Judges for 7th, 8th &9th standard students. Students seemed nervous to start but were enthusiastic and fully prepared for the competition. Students were also curious to know what other schools have prepared and imbibe knowledge from them.

One by one the groups came in front and presented, while in the end of each poster, Judges ask them questions based on the information presented and the poster they have made. 10 marks were assigned for the Poster presentation, 10 marks for their explanation and 10 marks for answers given for questions asked by the panel. Total 30 marks were allotted for each group to present. Students had opted various topics such as Wild vegetables, Medicinal Plants, Non-timber forest produce, and Veterinary medicine. Questionnaire for their basic data collection were provided by NGCPR team to the respective school teachers on the Teacher training workshop held on 4th December 2023. Teachers had prepared students on the basis of this questionnaire.

Aim of this competition was to make students talk with their parents, grandparents about the traditional knowledge on their respective topic. Students were strictly asked to not refer google information or any books other than to cross check the information given by elders. They were asked to write it in their

mother tongue if not comfortable in English.

Students presented their poster presentation with great confidence and were keenly waiting for the results. At 1:30 pm lunch break was given to all and few groups were left that were going to be covered in later half after lunch. Students sat in the agricultural fields of sugarcane, turmeric, lemon to have their lunch in nature and peace. All were overjoyed to have this competition in such close to nature, enjoying the cold breeze, the mountains around and the agricultural fields all wide open and the lovely bamboo house. After lunch, again the competition began for other students whose presentation was remaining.

Competition got over by 2:30, students were all looking forward for the results. They were given the participation certificate as well as cotton pouch as appreciation for their effort. Dr. Kranti presented a vote of thanks appreciating efforts taken by Principals, teachers, students and NGCPR team for conducting the event, however, students were waiting for results. They were informed, that due to participation in higher number, it is unable to declare the results immediately, but would be declared on 2nd March when prize distribution for all the competitions will be held. For this Poster Presentation Competition total 150 students had participated. These were the once which were chosen from each school. There were many students who participated in the competition, but only few student groups (2-3 groups) were selected for final round of competition. All were encouraged, appreciated and were honored by Dr. Kranti for huge participation and preparation of this Posters.

Subjects:

1) Medicinal Plants
2) Wild Vegetables
3) Veterinary Medicines
4) Traditional Knowledge
5) NTFP

5th & 6th Participants

Sr. no	School Name	Standard	Topic	Group	Student Name
1	New English School, Bholi	5th	Medicinal Plants	Group 1	Swara
					Shravani
					Sharanya
		5th	Medicinal Plants	Group 2	Riya
					Kirti
2	Vasantrao Pawar-patil Vidyalay, Shivajinagar, Bhadawade	5th	Wild Vegetables	Group 3	Anjali
					Purva
					Shrushti
3	Rajendra Vidyalaya, Khandala	5th	Medicinal Plant	Group 1	Madhura Jadhav
					Anisha Gaikwad
					Rachna Patane
					Aradhya takawale
					Kanhaiya Ubale
					Rishabh Gaikwad

6th,7th & 9th Participants

Sr.no	School Name	Std	Topic	Group	Student Name
1	Dnyansamwardhini Vidyalay	9th	Veternary Medicines	Girls 1	Sonakshi Mote
					Apurva Jadhav
					Vedantika Ghadge
					Pranjal Pisal
					Anisha Nevase
					Janhavi Sathe
					Vaishnavi Dalvi
					Sanskruti Salunke
			NTFP	Girls 2	Ariya Jadhav

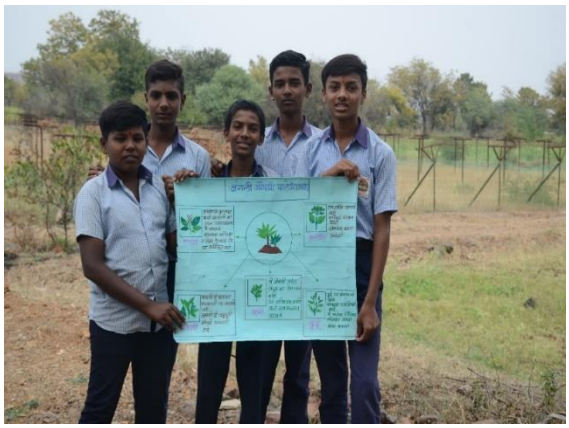
					Praniti Malekar
					Shreya Jadhav
					Janhavi Devade
					Purva Kulkarni
					Sae Bandhal
					Samiksha Nevase
			NTFP	Boys 1	Pranav Kumbhar
					Shlok Kadam
					Vedant Narke
					Atharva Narke
			Veterinary Medicines	Boys 2	Abhinav Kamble
					Harshraj Bansode
					Sanskar Nevase
					Varad Upasne
2	Pisaware	9th	Medicinal Plants	Group 1	Asmita
					Sakshi
			Flowers and medicinal plants	Group 2	Hazrat
3	Raireshwar vidyalay	7th, 8th & 9th	medicinal Plants	Group 1	Purva Salekaar
					Shravani Salekar
			Wild vegetables	Group 2	Anisha Navghane
					Aarti Navghane
					Prajakta Salekar
			medicinal Plants	Group 3	Shreyas Salekar
					Sarthak Salekar
			medicinal Plants	Group 4	Anushka Navghane
					Gauri Ambavle
					Anushka Salekar
					Samiksha Navghane
			medicinal Plants	Group 5	Dattatray Wadkar
					Shlok Navghane
			medicinal Plants		Samruddhi Salekar
					Prajakta Salekar
				Group 6	Prajakta Salekar
			medicinal Plants	Group 7	Prajakta Kurupkar
			medicinal Plants	Group8	Pranali Gaikwad
			medicinal Plants	Group 9	Sanika Gaikwad
			medicinal	Group	Apeksha Nigde

			Plants	10	
			medicinal Plants	Group 11	Shruti Navghane
4	Rameshwar Vidyalaya, wing	9th	Traditional Knowledge	Group 1	Sadiccha
					Samruddhi
					Shravani
					Siddhi
					Vaishnavi
					Adhiraj
		9th	Wild Vegetables	Group 2	Aditi
					Sanika
					Snehal
					Uday
					Yash
		9th	Traditinal Food	Group 3	Shreya
					Vaishnavi
					Vaishnavi
					Snehal
					Harsh
		7th & 9th	Medicinal Plants	Group 4	Manasvi
					Divya
					Bhagyashree
					Shruti
					Swaranjali
5	New English School, Bholi	8th	Wild Vegetables	Group 3	Pranav
					Aditya
					Anuraj
					Shantanu
		9th	Wild Plants	Group 4	Ariyan
					Atharva
					Prem
		9th	Traditinal Knowledge	Group 5	Trushna
					Aditi
		9th	Medicinal Plants	Group 6	Vaishnavi
					Tejaswini
6	Vasantrao Pawar-patil Vidyalay, Shivajinagar, Bhadawade	8th	Traditional Knowledge	Group 1	Amruta
					Kranti
					Vaishnavi
		8th	Veterinary Medicine	Group 2	Vedant
					Mahesh
					Ayush
		9th	Traditinal	Group 4	Ariya

			Food		Shraddha
					Riddhi
					Akanksha
		9th	Forest Plant	Group 5	Vedant
					Ariyan
					Yash
7	Panchakroshi Vidyalay, Lohamjawale	9th	Wild Vegetables	Group 1	Sakshi
					Janhavi
					Purva Kasurde
		7th & 9th	Wild Vegetables	Group 2	Pranali
					Shreya
					Shravani
		7th & 8th	Wild Vegetables	Group 3	Prathamesh
					Aryan
					Sai
					Vaishnavi
8	Samartha Vidyalay, Kanheri	7th	Medicinal Plant	Group 1	Shivraj
		9th	Veternary Medicine	Group 2	Sairaj
		8th	Medicinal Plants	Group 3	Pranav
					Vayujeet
9	Kranti Jyoti Savitribai Phule, Naigaon	9th	Medicinal Plants	Group 1	Harshada Bilare
					Venkatesh Devde
					Atharva Gaikwad
					Krushna Gaikwad
					Prathamesh Gaikwad
					Arjun Gunjale
					Sai Rajeshirke
					Vedant Sonawane
			Medicinal Plants	Group 2	Pradnya Khunte
					Pragati Nanaware
					Sanchita Newase
					Siddhi Newase
					Shrushti Newase
					Neha Sankpal
					Vaishnavi Newase
			Medicinal Plants	Group 3	Diksha Shekde
					Vaishnavi Salekar
					Manasi Shedge
					Shravani Veer
					Tanvi Veer

10	New English School, Palshi	8th	Wild Vegetables	Group 1	Amit Shirawale
					Priya Mhaske
					Samruddhi Bhargude
					Samartha Koli
					Glory Vanjare
			Wild Vegetables	Group 2	Rohit Shete
					Bhakti Gole
					Shrutika Raut
					Vaishnavi Newase
					Sanskruti Jagtap

1 Mr. Archana Kalyani (Judge) guiding the students



6 Students with their Poster

6: 5th and 6th standard Students displaying their poster along with judges

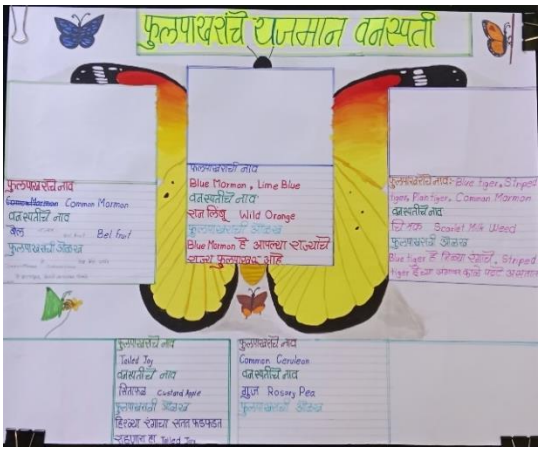
6 Mrs. Kanheri (Judge) addressing the students

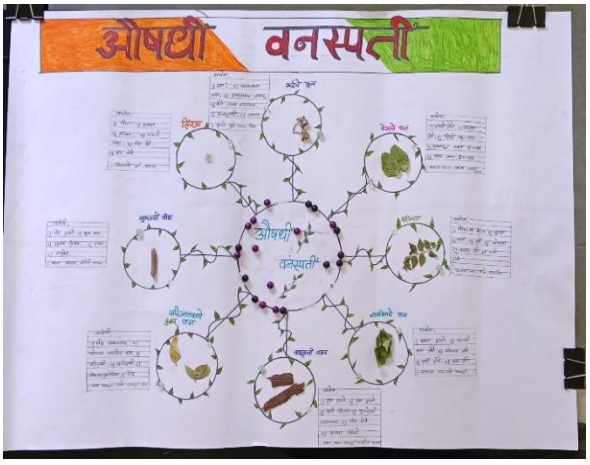
5. Students confidently explaining and having discussion with the Judge

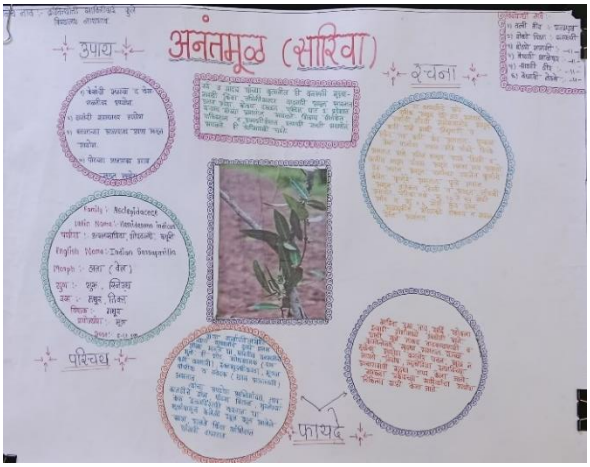
6. Felicitation of Guest Judges

6. Dr. datir addressing the rules for the competition

Few Winning Posters presented by students







Drawing Competition

Date: 26 February 2024
Schools of: Bhor and Khandala region

Sr. no	School Name	Standard
1	Panchakroshi mahavidyalay, Loham-jawale	7th
2	Zilla parishad school, Pisaware	7th
3	New English School Bholi	7th
4	K.S.P. vidyalay Naigaon	7th
5	Adarsh Vidyalay, Shirwal	7th
6	Dyansanvardhani highschool, Shirwal	7th
7	Shri Samartha Vidyalay, Kanheri	7th
8	New English School, Palashi	7th
9	Vasantrao pawar-patil vidyalay Bhadawade	7th
10	Rajendra vidyalay Shirwal	7th
11	Rameshwar Madyamik Vidyalay Wing	7th
12	Rayreshawar madhyamik Vidyalay, Titeghar	7th
13	Zilla Parishad School, Korle	7th

On 26 February 2024, an exciting drawing competition was organized at 11 Schools in Khandala region on the theme of ‘My Dream Village’ The event aimed to encourage students to express their artistic talents while fostering an appreciation for the beauty and importance of nature in our lives. The competition saw enthusiastic participation from students of 7th grades.

The theme for the competition, " My Dream Village" encouraged students to depict the significance of nature in our daily lives, highlighting the bond between humans and the environment. It aimed to inspire young minds to understand and appreciate the natural world, and to promote sustainability and conservation.

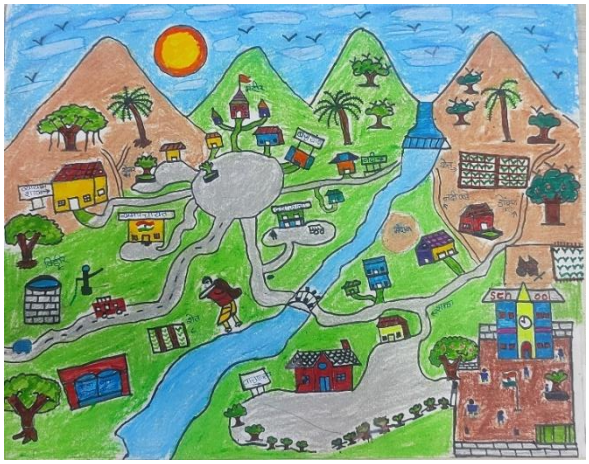
The students' artwork displayed a remarkable range of interpretations and styles. The participants showcased their imagination and artistic flair through their drawings, effectively capturing the essence of nature as their friend. The artworks portrayed serene landscapes, colorful flora and fauna, and human interactions with nature, all depicting the harmonious relationship between mankind and the environment. They
tried to present the comforts and facilities required for the village in their dreams through drawing

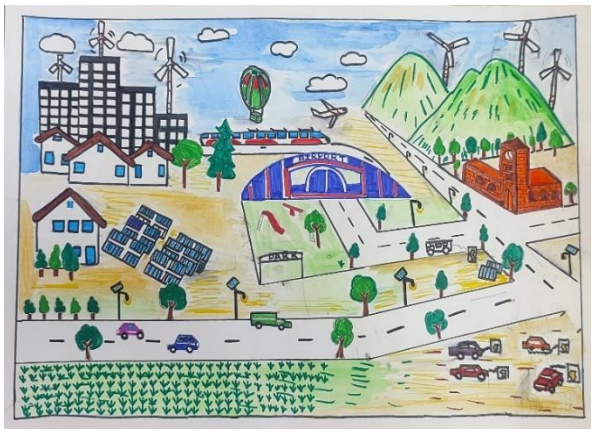
An esteemed panel of judges evaluated the artwork based on criteria such as creativity, technique, use of colors', and adherence to the theme. The judging process was conducted objectively and ensured fairness for all participants each artwork was carefully evaluated to determine the winners in different categories. The drawing competition had a positive impact on the students, fostering a sense of creativity, confidence, and self-expression. It provided an opportunity for students to unleash their artistic potential and develop their skills in a supportive environment as they shared their passion for art with their peers.

The drawing competition across various schools was a resounding success, thanks to the enthusiastic participation of students, the support of teachers and Schools, and the dedication of the organizing committee. The event not only showcased the talents of young artists but also served as a platform for promoting art education and creative expression within the community. Such initiatives play a crucial role in nurturing the next generation of artists and fostering a culture of creativity and innovation.

Overall, the competition served its purpose in inspiring and encouraging students to explore their artistic abilities and express themselves through the medium of art.

Photograph of the Drawings





Climate Change PPT Competition

Date: 6th march 2024

In Balwant college vita we arranged competition on climate change impacts on local area. There are 4 group involved in that competition. Sarjohan Patole sir welcome to us and give introduction to student and start the competition. Dr Shankar Shendge welcome to Dr Kranti Yardi, Rohit Kumbhar and Ajay Gangurde by giving book and flowers. Dr. Shendge give brief introduction about Balwant college vita and dept of botany and then Dr Yardi give information about NGCPR. In that competition the judge is Dr. Kranti Yardi and Dr. Shankar Shendge. Each presentation gives 10 min time to present ppt, after presentation judge asked some questions to Group.

Ppt -climate change Empact on flamingo in Mayani bird sanctuary

Group members: Saniya Mujawar, Roshani Jadhav, Sakshi Jadhav.

The group present ppt on climate change impacts on Mayani bird sanctuary. In that presentation students study the Mayani bird sanctuary area and information about sanctuary. In Mayani bird sanctuary is known for migratory Bird specially for flamingo. students study the habitat and nature of flamingo. Students study when flamingo come and go return to their place also, they found the reason why the flamingo was Stop to came Mayani bird sanctuary. Also, which human interference and climate change to stop migration. they found some solution for this migration.

Ppt – climate change impact on wild animal leopard

Group Members: Abhishek Lade, Dhanashree Jadhav

The second ppt presentation climate change impact on wild animal leopard

seen in Masurne village area. The student explained that deforestation and mining is the main cause to seen leopard in village area. In Masurne Village side are lot of deforestation land for mining. they explain the causes for situation also found solution’s

Ppt – climate change impact on shading of mango flowering.

Group Members: Atharv Patil

The third ppt presentation climate change impact on shading of mango flowering. student study the local area i.e. his garden area he saw the mango flowering shading. Due to climate change effect like temperature, humidity, flood and air pollution cause the shading of mango flowers. due to this change mango production is low. He studied last 3,4-year data of mango production. in this year mango production is relatively less than last 3 years approx. 25% production is decreased. He finds some solution for this problem like temperature humidity maintaining foggier, use of some fertilizer etc.

Ppt-Climate change effect on agriculture crop.

Group members: Sakshi Jadhav, Priyanka Gujale.

The last PPT presentation on decreasing production of millets crop and increase the production of cash crops in Karve area. The student study the area of Karve village. they took interview of some people of from the Karve Village. People said that 10 years back they grow the millets like pulses cereal Shalu hybrid and so on. but due climate change like temperature, uncertain rain, weather effect on the crops and production were decreased and farmer had lot of losses .so the farmers turn to production of cash crops like maize and sugarcane. There were seen long belts of sugarcane. Sugarcane is lazy crop they had low maintenance that's why farmers choose these crops.

Prize distribution:

The mid-session of day was result and prize distribution of theses computation. Dr. Kranti Yardi and Dr. Shankar Shendge sir revel the result of these competition on the basis of study of area, information collection methods, effect and presentation. The first prize winner was climate change impacts on shading mango flowering. and second winner was climate change impacts on agriculture crops. All students gave the participants certificate and winner students gave bags and certificate.

Vote of thanks:

The last session of the program was vote of thanks Dr. S. Patil sir thanks to Dr. Kranti madam, Dr. Shendge sir, NGCPR team and dept faculty and all participants students also those students which were attended the program. Program were concluded.

Figure 1: climate change ppt presentation

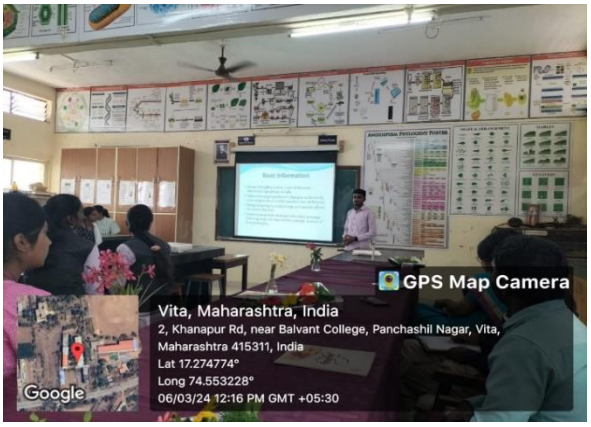


Figure 2: climate change ppt presentation

Figure 3: Dr. Kranti Yardi gave information about ppt presentation

Figure 4: Prize distribution

Figure 5: Prize Distribution

Figure 6: Group photo with students and botany faculty

Prize Distribution

Date: 2nd March 2024

Activities undertaken in academic year 2023-24 through NGCPR and FDCM. A prize distribution program was organized for all the schools, students and teachers who responded enthusiastically. Mr. Desai sir was present as the chief guest of this program. Also Mr. Ravindra Wankhede (IFS), Mr. Jadhav, Mr. Nadgouda was present.

Miss. Radhika Welcoming to the guest

Mr. Rohit started the program by welcoming and introducing the guests. Mr. Desai expressed his thoughts. Mr. Desai is a well-known business man. He is passionate about environment. He informed about the various activities he has done. He assured that he will help to do such new projects for the students Mr. Wankhede informed about the importance of education awareness program and climate change. Sir being an IFS officer told everyone about the importance, identity and other information of forest department. Students were guided to participate in all the programs. The prize distribution program was held in the presence of chief guests. Many competitions were conducted under this initiative implemented through FDCM. In this, students participated in many competitions. Numbers were drawn through examiners. Those students were awarded prizes and certificates.

Appreciation letters were given to the schools which performed well. Teacher representatives who respond promptly are also felicitated appropriately.

Mr. Raviraj outlined the program for next year. The program was concluded by thanking everyone

7th, 8th & 9th Group

Prize	School Name	Topic	Group
1st	Dyansamwardhini Vidyalaya	NTFP	Pranav Kumbhar
			Shlok Kadam
			Vedant Narke
			Atharva Narke
1st	Krantijyoti savitribai Phule madhyamik Vidyalay, Naigaon	Medicinal Plants	Vaishnavi Newase
			Diksha Rokade
			Vaishnavi Salekar
			Manasi Shedge
			Shravani Veer
			Tanvi Veer
2nd	Raireshwar	medicinal Plants	Samruddhi Salekar
			Prajakta Salekar
			Prajakta Salekar
1st	Panchakroshi Madhyamik Vidyalaya, LohamJawale	Wild Vegetables	Prathamesh Padalkar
			Aryan Bhoite
			Sai Gaikwad
			Vaishnavi Jagtap
2nd	New English School, Palshi	Wild Vegetables	Amit Shirawale
			Priya Mhaske
			Samruddhi Bhargude
			Samartha Koli
			Glory Vanjare
1st	Vasantrao Pawar-Patil Vidyalaya, Bhadawade	Veternary Medicine	Vedant
			Mahesh
			Ayush
2nd	Dyansamvardhini	Veternary Medicines	Abhinav Kamble
			Harshraj Bansode
			Sanskar Nevase
			Varad Upasne
1st	Vasantrao Pawar-Patil Vidyalaya, Bhadawade	Traditinal Knowledge	Amruta
			Kranti
			Vaishnavi
2nd	Rameshwar Madhyamik Vidyalaya, Wing	Traditinal Knowledge	Sadiccha Mokashi
			Samruddhi Khopade
			Shravani Mahangare
			Siddhi Sonavane
			Vaishnavi Talekar
			Adhiraj Talekar
Consolation	New English School, Bholi	Traditional Knowledge	Trushna
			Aditi

5th & 6th Group

Prize	School Name	Topic	Group
1st	Vasantrao Pawar-Patil Vidyalaya, Bhadawade	Wild Vegetables	Anjali
			Purva
			Shrushti
2nd	Rajendra Vidyalaya, Khandala	Medicinal Plants	Madhura Jadhav
			Anisha Gaikwad
			Rachna Patane
			Aradhya Takawale
			Kanhaiya Ubale
			Rishabh gaikwad

Individual Prizes

Prize	School Name	Topic	Group
	Shri Samartha Vidyalaya, Kanheri	Medicinal Plants	Shivraj
	Shri Samartha Vidyalaya, Kanheri	Veternary Medicine	Sairaj
	Pisavare Vidyalaya, Pisavare	Host Plants & Butterfly	Hazrat

Seed Collection Competition

June 2023

- Total participation of Schools= 12
- Total Participation= 200+

- Criteria

1.देशी आणि स्थानिक वृक्ष प्रजाती
2. दुर्मिळ वनस्पती

Prize

Shri Samartha Vidyalaya, Kabheri

Shivraj Thombare

Ecofriendly Ganesh Decoration Competition

September 2023

- Total participants= 10 schools
- Participants= 120+ students

- Criteria

1. Use of eco friendly items
2. Preparing Ganesha idol of शाडूमाती
3. Eco friendly theme

1st

Shri Samartha Vidyamandir , Kanheri

Ayush Santosh Gole

2nd

Pisavare Madhyamik Vidyalaya, Pisavare

Vedika Khapate

Drawing Competition

February 2024

- Total participation of schools=12 schools
- Total students participants=600+

Topic: माझ्या स्वप्नातील गाव

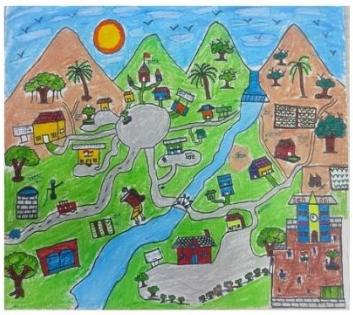
- Criteria

1. अपेक्षित पर्यावरणपूरक सुविधा
2. चित्र स्वतःच्या इमॅजिनेशन मधील असावे Google वरील नसावे

1st

Zilla Parishad Prathamik Shala, Korle

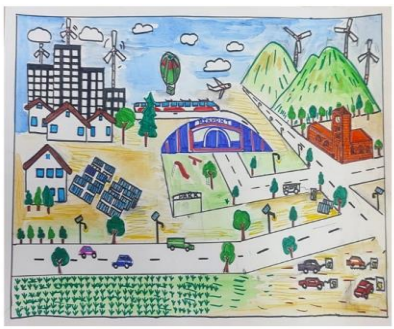
Sujal Namdeo Chikne



2nd

Dyansamvardhini Madhyamik Vidyalaya

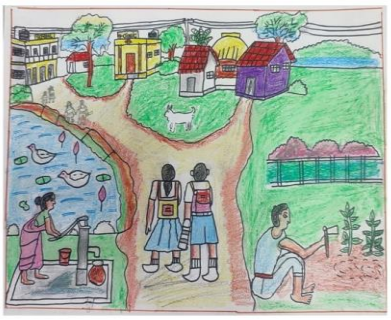
Satesh Siddhesh Patil



3rd

Krantijyoti Savitribai Phule, Vidyalaya, Naigaon

Shraddha Sunil Shelar



उत्तेजनार्थ

Vasantrao Pawar-Patil Vidyalaya, Shivajinagar-Bhadawade

Swasti Pravin Pawar

उत्तेजनार्थ

Pisavare Madhyamik Vidyalaya, Pisavare

Shrutika Narayan Dhumal

उत्तेजनार्थ

Panchakroshi Vidyalay, Lohamjawale

Dattatray Zanzane

Poster Presentation Competition

7th, 8th & 9th Group

January-February 2024

- Total Participation of schools=12
- Student participants=200+

- Criteria

1. ग्रामीण भागातील लोप पावत चाललेली माहिती डॉक्युमेंट स्वरूपात आणण्याचा प्रयत्न
2. पारंपारिक स्वरूपाची माहिती

Non-Timber Forest Produce

1st

Dyansamwardhini Vidyalaya

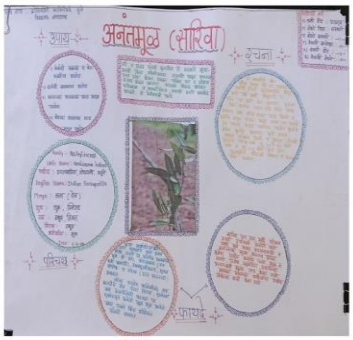
Pranav Kumbhar
Shlok Kadam
Vedant Narke
Atharva Narke

Medicinal Plants

1st

Krantijyoti savitribai Phule madhyamik Vidyalay, Naigaon

Vaishnavi Newase
Diksha Rokade
Vaishnavi Salekar
Manasi Shedge
Shravani Veer
Tanvi Veer



2nd

Raireshwar Madhyamik Vidyalaya, Titeghar

Samruddhi Salekar
Prajakta Salekar
Prajakta Salekar

Wild Vegetables

1st

Panchakroshi Madhyamik Vidyalaya, Loham-Jawale

Prathamesh Padalkar
Aryan Bhoite
Sai Gaikwad
Vaishnavi Jagtap

2nd

New English School, Palshi

Amit Shirawale
Priya Mhaske
Samruddhi Bhargude
Samartha Koli
Glory Vanjare

Veternary Medicine

1st

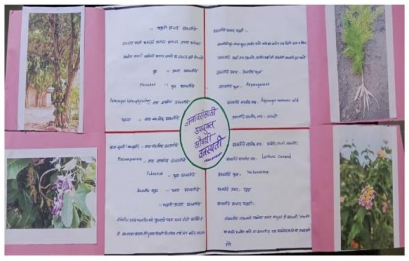
Vasantrao Pawar-Patil Vidyalaya, Bhadawade

Vedant
Mahesh
Ayush

2nd

Dyansamwardhini Madhyamik, Vidyalaya

Abhinav Kamble
Harshraj Bansode
Sanskar Nevase
Varad Upasne

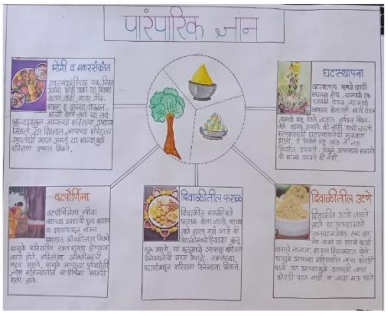


Traditional Knowledge

1st

Vasantrao Pawar-Patil Vidyalaya, Bhadawade

Amruta
Kranti
Vaishnavi



2nd

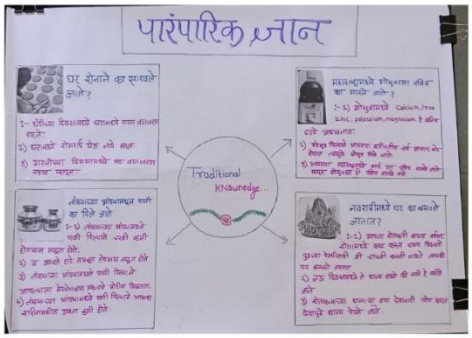
Rameshwar Madhyamik Vidyalaya, Wing

Sadiccha Mokashi
Samruddhi Khopade
Shravani Mahangare
Siddhi Sonavane
Vaishnavi Talekar
Adhiraj Talekar

उत्तेजनार्थ

New English
School, Bholi

Trushna
Aditi



5th & 6th group

1st

Vasantrao Pawar-Patil
Vidyalaya, Bhadawade

Anjali
Purva
Shrushti

2nd

Rajendra Vidyalaya,
Khandala

Madhura Jadhav
Anisha Gaikwad
Rachna Patane
Aradhya Takawale
Kanhaiya Ubale
Rishabh gaikwad

Individual special prizes for appreciation

Prize

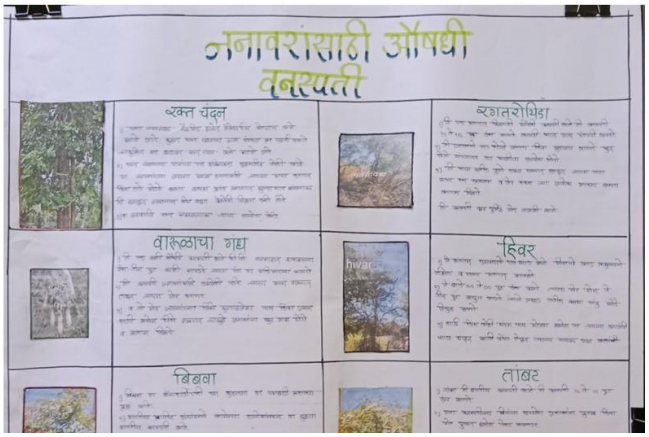
Shri Samartha Vidyalaya, Kabheri

Shivraj Thombare

Prize

Shri Samartha Vidyalaya, Kabheri

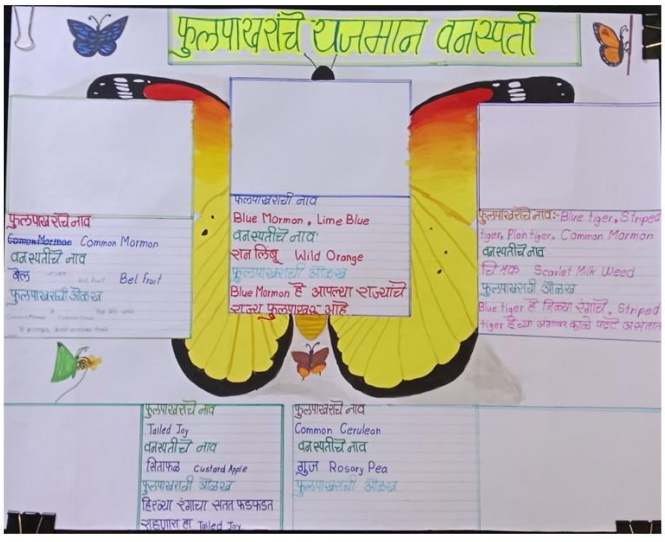
Sairaj



Prize

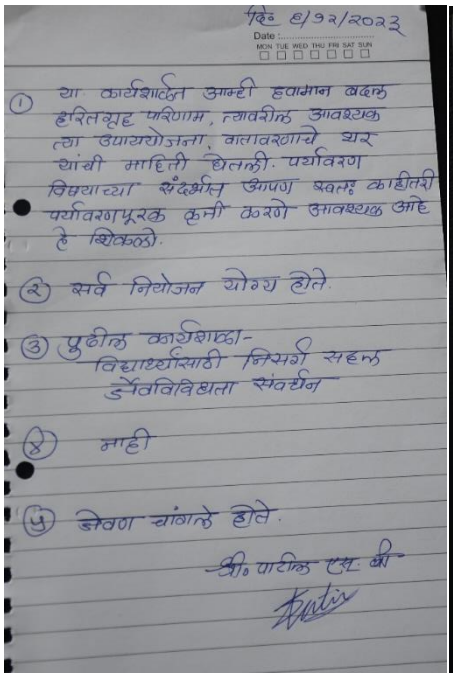
Pisavare Madhyamik Vidyalaya,

Hazrat



Photographs of Prize Distribution

Feedbacks From Participants



दि. 6/12/2023

① या कार्यशाळेत आम्ही हवामान बदल, हरितगृह परिणाम, त्यावरील आवश्यक त्या उपाययोजना, वातावरणाचे थर यांची माहिती घेतली. पर्यावरण विषयाच्या संदर्भात आपण स्वतः काहीतरी पर्यावरणपूरक कृती करणे आवश्यक आहे हे शिकलो.

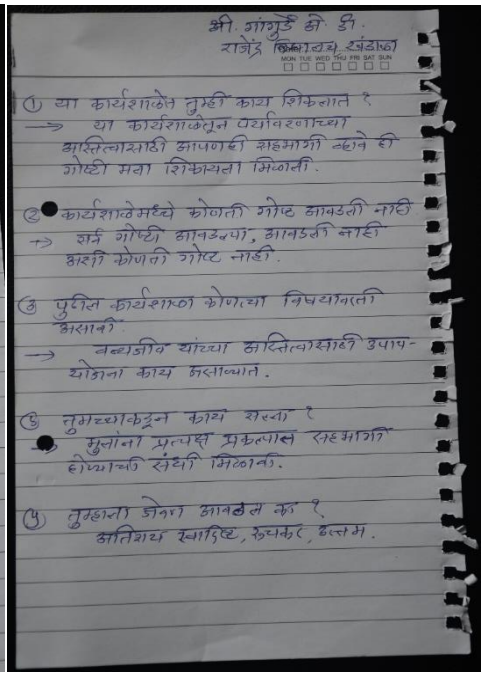
② सर्व नियोजन योग्य होते.

③ पुढील कार्यशाळा- विद्यार्थ्यांसाठी निसर्ग सहल डोंगरविविधता संवर्धन

④ नाही

⑤ जेवण चांगले होते.

डी. पाटील एस. बी.



श्री. गांगुर्डे बी. डी.
राजेंद्र विद्यालय, खंडाळा

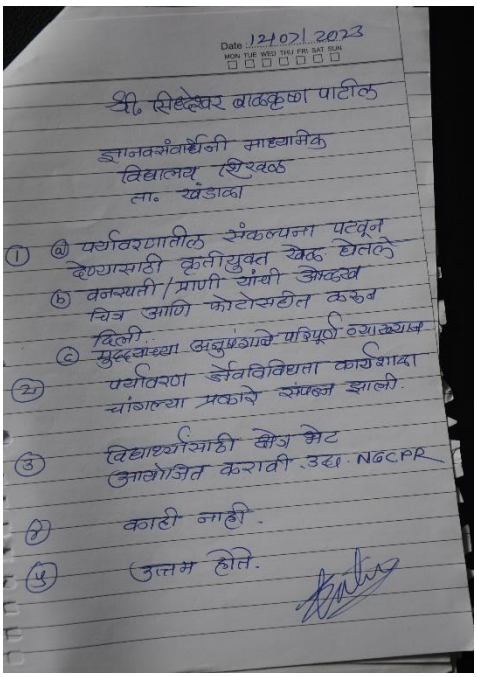
① या कार्यशाळेत तुम्ही काय शिकलात ?
→ या कार्यशाळेतून पर्यावरणाच्या अस्तित्वासाठी आपणही सहभागी व्हावे ही गोष्टी मला शिकायला मिळाली.

② कार्यशाळेमध्ये कोणती गोष्ट आवडली नाही
→ अशी गोष्टी आवडल्या, आवडली नाही अशी कोणती गोष्ट नाही.

③ पुढील कार्यशाळा कोणत्या विषयावरती असावी.
→ वन्यजीव यांच्या अस्तित्वासाठी उपाय-योजना काय असाव्यात.

④ तुमच्याकडून काय राहिले ?
→ मुलांना प्रत्यक्ष प्रकल्पास सहभागी होण्याची संधी मिळाली.

⑤ तुम्हाला जेवण आवडले का ?
अतिशय स्वादिष्ट, रुचकर, उत्तम.



Date 12/07/2023

श्री. सिद्धेश्वर बाळकृष्ण पाटील
ज्ञानसंवर्धिनी माध्यमिक विद्यालय, शिरवळ
ता. खंडाळा

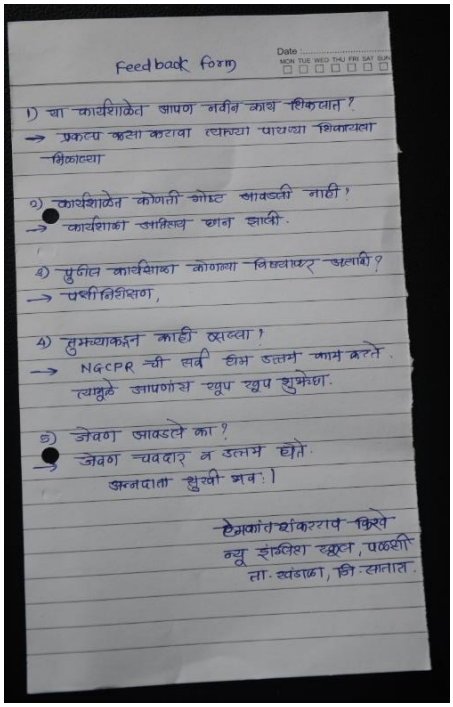
① ⓐ पर्यावरणातील संकल्पना पटवून देण्यासाठी कृतीयुक्त खेळ घेतले
ⓑ वनस्पती/प्राणी यांची अप्रतिम चित्र आणि कोटेशनसह करून दिली.
ⓒ मुद्देसूद असलेले पॉवरपॉइंट प्रेझेंटेशन

② पर्यावरण डेव्हलपमेंट कार्यशाळा चांगल्या प्रकारे संपन्न झाली.

③ विद्यार्थ्यांसाठी क्षेत्र भेट आयोजित करावी. उदा. NGCPR

④ काही नाही.

⑤ उत्तम होते.



Feedback form

Date

1) या कार्यशाळेत आपण नवीन काय शिकलात ?
→ प्रकल्प कसा करावा त्याच्या पायऱ्या शिकायला मिळाल्या

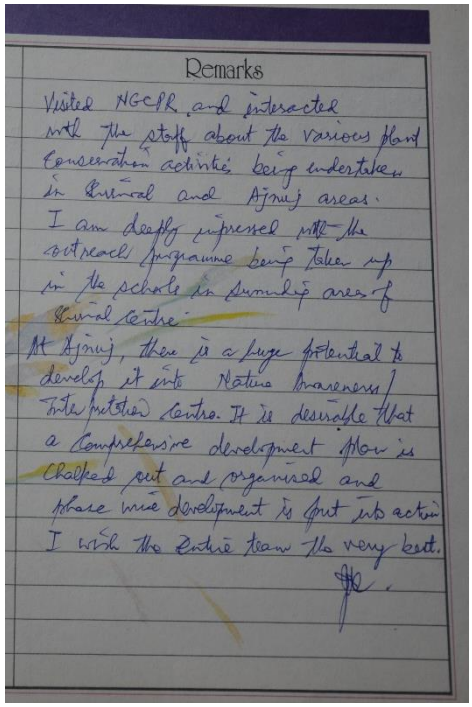
2) कार्यशाळेत कोणती गोष्ट आवडली नाही ?
→ कार्यशाळा अतिशय छान झाली.

3) पुढील कार्यशाळा कोणत्या विषयावर असावी ?
→ पक्षीनिरीक्षण,

4) तुम्हाकडून काही राहिले ?
→ NGCPR ची सर्व टीम उत्तम काम करते. त्यामुळे आपणास खूप खूप शुभेच्छा.

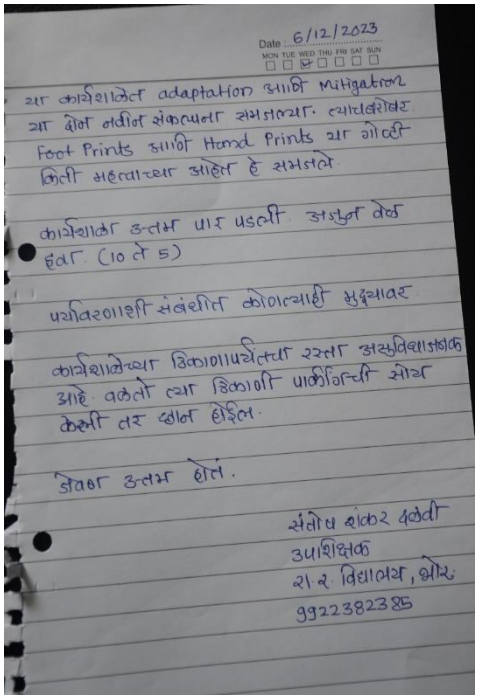
5) जेवण आवडले का ?
→ जेवण चवदार व उत्तम होते.
अन्नदाता सुखी भव !

हेमकांत शंकरराव किरवे
न्यू इंग्लिश स्कूल, पळशी
ता. खंडाळा, जि. सातारा



Remarks

Visited NGCPR and interacted with the staff about the various Plant Conservation activities being undertaken in Rural and Ajnuj areas.
I am deeply impressed with the outreach programme being taken up in the schools in surrounding areas of Rural centre.
At Ajnuj, there is a huge potential to develop it into Nature awareness / interpretation centre. It is desirable that a comprehensive development plan is chalked out and organised and phase wise development is put into action
I wish the entire team the very best.



Date 6/12/2023

या कार्यशाळेत adaptation आणि Mitigation या दोन नवीन संकल्पना समजल्या. त्याचबरोबर Foot Prints आणि Hand Prints या गोष्टी किती महत्त्वाच्या आहेत हे समजले.

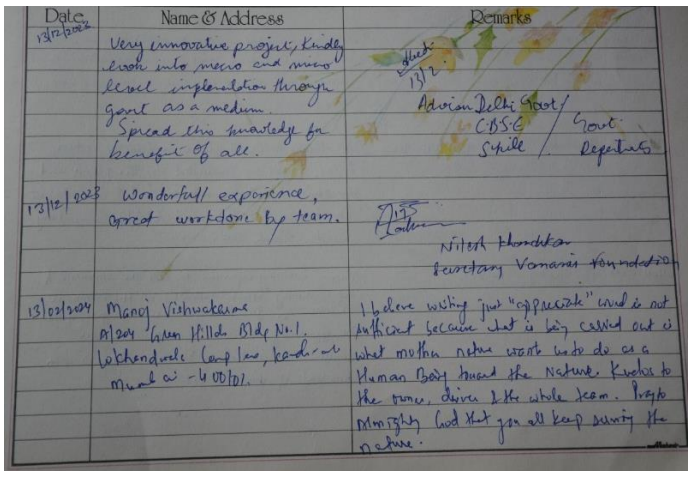
कार्यशाळा उत्तम पार पडली. अप्रतिम देव ear. (10 ते 5)

पर्यावरणाशी संबंधित कोणत्याही मुद्द्यावर

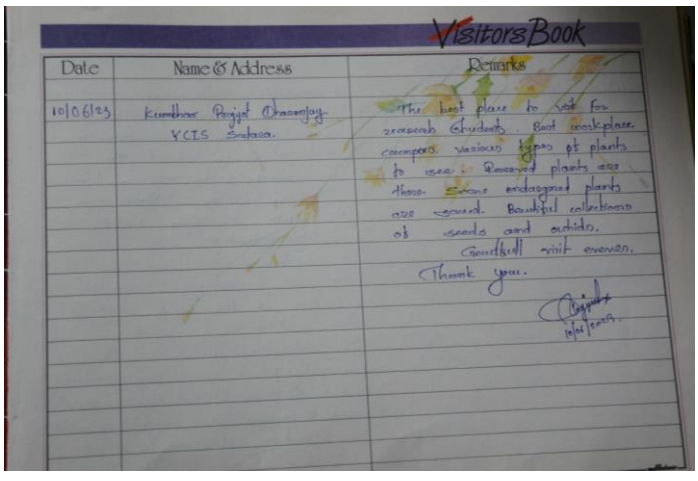
कार्यशाळेच्या ठिकाणापर्यंतचा रस्ता अस्तविकासाचा आहे. वळतो त्या ठिकाणी पार्किंगची सोय केली तर छान होईल.

जेवण उत्तम होते.

संतोष शंकर वळवी
उपशिक्षक
रा.प. विद्यालय, शिरवळ
9922382385

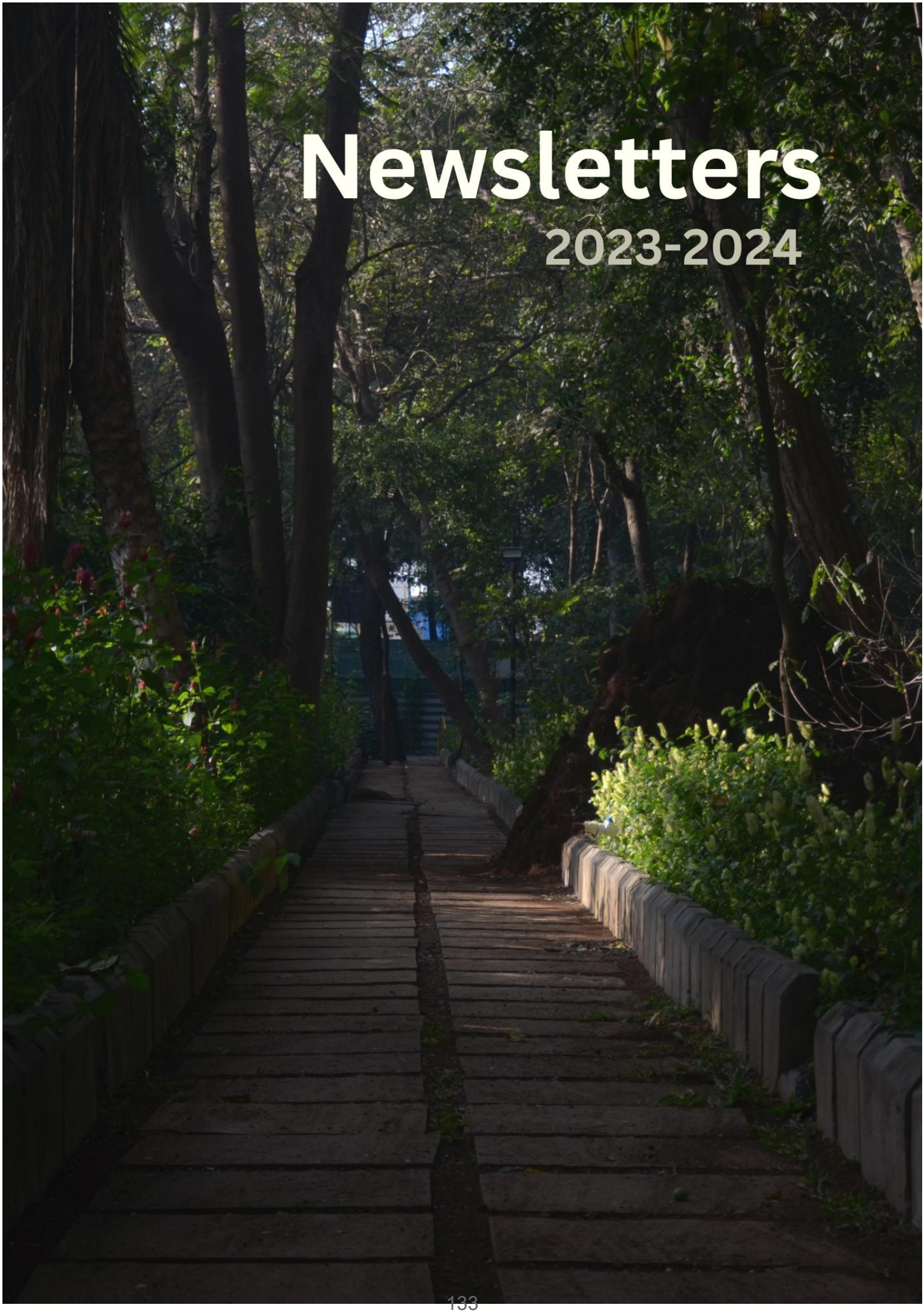


Date	Name & Address	Remarks
13/12/2023	Very innovative project, kindly work into micro and micro level implementation through govt as a medium. Spread this massively for benefit of all.	Attached 13/12 Advisor Delhi Govt/ CBSE / Govt. Skills / Deptts. Nitesh Khandekar Secretary Vanarai Foundation
13/12/2023	Wonderfull experience, Great workdone by team.	
13/02/2024	Manoj Vishwakarma A/204 Green Hills Bldg No.1, Lokhandwala Complex, Kandivali Mumbai - 400101.	I believe using just "approach" word is not sufficient because that is only carried out in what mother nature wants us to do as a Human Being toward the Nature. Kudos to the nurse, driver & the whole team. Prayer Almighty God that you all keep serving the nature.



Visitors Book

Date	Name & Address	Remarks
10/06/23	Kumbhar Pooja Dhananjay KCIS Satara.	The best place to visit for research Students. Best workplace compared various types of plants to see. Preserved plants seed there. Some endangered plants are preserved. Beautiful collections of seeds and exhibits. Greatfull visit everyone. Thank you.


Newsletters
2023-2024


Memecylon umbellatum

April-May 2023

NGCPR Project on Communication, Education and Public Awareness for Climate Action and Biodiversity Conservation

April- May Programs

- Teacher training Workshop
- RR College Visit to
- World Biodiversity Day

Teacher Training Workshop

Teacher Training Workshop was arranged on 11th- 12th April 2023. It was an introductory workshop for NGCPR team as well as for teachers. Teachers from surrounding school and colleges of Bhor, Lohamjawale, Atit, Karnavdi, Bhadawde, Bholi, Pisaware, Ajnuj villages had come. On the first day, introduction was given by all teachers present. Later, Dr. Kranti introduced NGCPR team to all teachers. Moreover, Dr. Sagar gave a presentation on objectives, vision and work of NGCPR. Dr. Kranti explained about and its work. She also emphasized on significance of educating students and encouraging teachers of schools and colleges about environment, its prevailing problems as these students being the next generation to face, address and combat climate change. Mr. Nivrutti Sane, HR head, Godrej-Lawkim also explained about nature friendly processes of the company and its manufacturing. He also said that competitions will imbibe students with their creative thoughts to change things around, help conserve nature and encourage them towards choosing practices that won't harm nature in longer run. Dr. Erach Bharucha gave a brief about biodiversity, climate change and a need to educate and create awareness to people, teachers and students.

Plate 1 Teacher Training workshop 1 – Teachers of various schools and NGCPR () Team

Memecylon umbellatum, commonly known as Ironwood tree (अंजन)
It is a large shrub or small tree with amazing bright blue flowers that look almost unreal. The trees bloom once or twice a year. The tree has a thin bark, so it is sometimes also called 'Nipis kulit' or 'thin-skinned' in Malay. It provides hard timber used for building houses and boats. A yellow dye can be extracted from the leaves and the bark is used to treat bruises. The leaves are used in the treatment of gonorrhea, or when mixed with several other ingredients, they make good fomentations for external use.

Competitions such as Nature photography, Poster presentation and Seed collection were announced during Teacher training workshop in the month of April.

RR College delegates Visit to NGCPR

Earlier on 8th May, Dr. Kranti had visited RR College, Bhor to introduce project. On 11th May, Chairman and Board of Director members visited NGCPR. Dr. Kranti explained them in detail about the project, objectives, vision, work and expected output. They were impressed and encourage to work together. They were also interested to know about techniques to treat indigenous seeds so their germination rate increases and help conserve these varieties. They were fascinated by the idea to club school students, college students, teachers, farmers and locals in this project and aware each section with different types of activities pertaining to their interest.

Plate 2 Chairman, BOD of RR College, Bhor long with NGCPR () Team

Plate 3 Teachers, Students participated along with Mr. Vikas Gupta and NGCPR Team

World Biodiversity Day

World Biodiversity Day is celebrated on 22nd May every year. On this occasion, NGCPR had arranged poster presentation competition and Photography competition for nearby schools. Total 80 students from different schools participated in the competition and sent their photographs as well as posters. Dr. Erach Bharucha selected the winners. Dr. Sagar explained about NGCPR, its objectives and work. Mr. Vikas Gupta, IFS, Nagpur addressed importance of environment, sustainable practices and our role in conserving nature. Later, Prizes were distributed among the students. Parents of few students attended the program and were thankful and glad to NGCPR Team to arrange these kind of competitions for their children.

Plate 4 Photographs & Posters of participants

Plate 5 Mr. Vikas Gupta presenting the winner with prize

Plate 6 Mr. Vikas Gupta while addressing the audience


Acampe praemorsa


Aerides maculosa


Rhynchostylis retusa


Spathoglottis plicata

NGCPR June 2023

NGCPR Project on Communication, Education and Public Awareness for Climate Action and Biodiversity Conservation

June Programs

- World Environment Day program
- Agro Biodiversity Conservation
- Seed Collection Drive by School students
- Research Activity

World Environment Day

Every year 5th June is celebrated as World Environment Day. The main objective of this day is to increase the quality of environment, create awareness about the problems and conservation. A program was organized at Naoroji Godrej Center for Plant Research, Shirwal to mark this day.

Plate 1 : Employees answering the quiz questions

Plate 2: Employees who won the quiz round along with NGCPR team

In the program, information was given about the environmental conservation work of NGCPR. A walking and talking quiz was conducted on the theme of Environment and those who gave the correct answers were given an upcycled pouch as a prize. The employees of Godrej Lawkim Motors participated in the event.


Spathoglottis plicata

Family Orchidaceae is one of the largest families among higher plants in India. It is estimated that about 1300 species and 140 genera of orchids are found in our country. Himalayas having 800 spp and the Western Ghats represents with 300 spp. Orchids are perennial herb with simple leaves. Orchid has specialized flower structure, greatly modified for insect pollination. Large number of Orchids are epiphytes, terrestrial and a few saprophytes and leafless in nature. NGCPR has 7 different ornamental and endemic orchids.

Agro Biodiversity Conservation

On 19th June 2023 at NGCPR, Indigenous Seed Conservation and Exhibition program was held with great enthusiasm. The Chief Guest, Padmashri Rahibai Popere known as Beejmata, Annamata Ms. Mamtabai Bhangare, Mr. Sanjay Patil, Chief Executive Officer of BAIF, Dr. Erach Bharucha were present in this event. The main objective of the program was conservation and promotion of indigenous varieties of crops.

Farmers were informed about the importance of indigenous varieties, identification of the variety and how to get the seeds. Along with this, an exhibition of various varieties of indigenous plant species was held. Various types of ragi, sorghum, rice, sava, rala, maize, kodo millets, pumpkin, chawli, mung bean, ghevda were seen in it. Rahibai is a breeder of traditional varieties of this farming family. Rahibai was honored by the Government of India for preserving indigenous varieties of these plants. She was awarded with Padma Shri in 2020. Today there are 114 varieties of 52 crops in Rahibai's 'Indigenous Seed Bank'. She has been included in the BBC's 100 Most Influential Women.

Plate 3: Ms. Rahibai Popere, Ms. Mamata Bhangare, Mr. Sanjay Patil, Dr. Erach Bharucha and Dr. Kranti Yardi

No company in the world has this traditional tasty and natural seed in its original natural form. BAIF Chief Executive Sanjay Patil informed about the work of BAIF. Total 80 workers of Godrej Lawkim and 15 local farmers were present for this event. He guided the audience on why nature to conserve it and appealed to participate in the upcoming schemes.

Plate 4: BAIF exhibition of different varieties of crops

Plate 5: Employees of Godrej Lawkim watching the exhibition

Plate 6: Employees of Godrej Lawkim present at session given by Ms. Rahibai

Seed Collection Drive for School Students

Different seeds were collected by school students. Total 10 schools participated in this event. Conservation of some rare species is done through NGCPR under which plant seeds are collected from nature. Not every time the seed will take its root in nature, it needs to be given some treatment. Seeds that do not germinate naturally are treated to increase their germination capacity. Conclusions are drawn by giving different treatments and the best method is implemented. These included Tetu Medhshingi, Erinocarpus, Abai, Hirda, Behda. Based on these experiments, the germination capacity of the seeds was increased from 50 to 90 percent.

Plate 7: Seeds collected by students

Plate 8: Student from Shri Samartha Vidyamandir, Kanheri received 1st prize

Plate 9: Student from Rameshwar Vidyalay, Wing receiving 2nd prize

Plate 10: Student from Rameshwar Vidyalay, Wing receiving participation prize

Plate 11: Student from raireshwar Vidyalay, Titheghar receiving participation prize

Plate 12: Dioscoria bulbifera (Kadu karanda)

NGCPR Activity

Yam (Discoria) species is economically important staple tuber crop. Tubers are nutritious and medicinally important. *Discoria esculenta* (Kanaga) & *Dioscoria bulbifera* (Kadu Karanda) are procured from Konkan region and are now planted at NGCPR and Ajnuj. Yam production for human consumption and Industrial use is limited by storage loses. Its physiology, storage viability evaluation studies are under progress at NGCPR.


Iphigenia stellata

NAOROJI GODREJ CENTRE FOR PLANT RESEARCH,

NGCPR July 2023

NGCPR Project on Communication, Education and Public Awareness for Climate Action and Biodiversity Conservation

July Programs

- Teacher Training Workshop
- Tree plantation
- Ex-situ conservation of plants

Teacher Training Workshop

Two days Teacher Training workshop was arranged for school teachers. Total 15 teacher representatives from various schools of Shirwal area were present for this activity. The main objective of this program was to create environment awareness among school students and increase the participation of students in environmental conservation work.

On this occasion Mr. Subhash Badve (IFS), Dr. Kranti Yardi, Dr. Shivam Trivedi, Dr. Sagar Datir, NGCPR Team as well as Dr. Erach Bharucha, an Environmentalist was present. Teacher representatives from various schools attended the workshop.

Through this program information was given about various activities that can be taken up in schools. Experts also guided about how important environment is for human life and why we should conserve it. The importance of food chain was demonstrated through games. Information about the experiment box which can be used for practical was given and the solar unit which can be prepared at minimum cost was demonstrated.


Plate 1: Teacher Training workshop at Ajnuj farm

Iphigenia is perennial herb called as “Gulabi Bhuichakra” it is valuable medicinal plant. Blooming season for this species is from June to October. The restricted distribution, seasonal occurrence especially on grazing grasslands, and over-exploitation for food and medicinal use have threatened its survival of different *Iphigenia* species. Expansion of agricultural land, urbanisation, and burning of grasslands during summer season limits the natural propagation and dispersal of *Iphigenia* seeds.

Plate 2: Nature Trail with teachers

Plate 3: Foodchain activity conducted by Dr. Kranti

In the second day session, Dr. Kranti Yardi took participants on a nature trail to study the various species of trees at NGCPR Ajnuj Farm, Ajnuj. Dr. Kranti explained all the species of trees found in this area, their scientific names, native and exotic species and the dependence of various insects and birds on trees for shelter, travel and food. The trainees were given information about local trees like Umber, Wad, Amla, Neem and foreign trees and plants like Gulmohar, Nilgiri, African teak etc.

Tree Plantation Drive in Schools

Naoroji Godrej Center for Plant Research organized a tree plantation program in schools in the month of July. Under this initiative, ideas such as various types of indigenous trees, herbs, butterfly garden and Nakshatravan were implemented. After selecting suitable places in the schools, the area was inspected and suitable trees were planted. These schools included Shree Samarth Vidyamandir Kanheri, New English School Bholi, Vasantrao Pawar-Patil Vidyalaya Bhadwade, Raireshwar Madhyamik Vidyalaya Titeghar, Z.P.Shala Pisaware, Vidyapratisthan Bhor English Medium School Bhor.

Plate 4: Students enjoying plantation drive in rain

Trees were planted with the help of school children. Children participated enthusiastically. 352 types of trees were planted. Guidance was given on the care and maintenance of those plant.

Plate 5: Plantation by students at Raireshwar School

Plate 6: Plantation at Kanheri School

Plate 7: Plantation at Pisaware School along with NGCPR team and Sarpanch

Ex-situ Conservation of Plants

Naoroji Godrej Centre for Plant Research is known for conserving various indigenous variety of plant species such as *Radermachera xylocarpa* (Khadshingi), *Oroxylum indicum* (Tetu), *Terminalia bellirica* (Behada), *Terminalia chebula* (Hirda), *Dolichandrone falcata* (Medhshingi), *Sapindus mukorossi* (Reetha), *Annona reticulata* (Ramphal) *etc*. NGCPR aims to increase the population of such varieties as a conservation measure and provide it to the nearby areas. One of the initiative is *Erinocarpus nimmonii* which is given to Pisaware School as an ex-situ conservation measure.


Radermachera xylocarpa


Oroxylum indicum


Sapindus mukorossi

Terminalia bellirica

Datura metel

NAOROJI GODREJ CENTRE FOR PLANT RESEARCH,

NGCPR August 2023

NGCPR Project on Communication, Education and Public Awareness for Climate Action and Biodiversity Conservation

August Programs

- Bonsai Training Workshop
- Bamboo Rakhi workshop
- Ex-situ Conservation of *Erinocarpus*

Bonsai Training Workshop

Bonsai Training Workshop was organized on 8th August 2023 through Naoroji Godrej Center for Plant Research, Shirwal. The workshop was conducted to provide vocational perspective to rural children and generate new income streams. Students aged 18 to 24 from different areas participated in the workshop. Shailaja Kapila of Kapila Creations was present as a guide for this workshop. Ms. Shailaja is a professional bonsai artist. She has been working in this field for many years. The program was started by planting trees by the guests. Dr. Kranti Yardi introduced herself to all the trainees and welcomed everyone. All the trainees present briefly introduced themselves.

Plate 1: Bonsai Training workshop at Ajnuj farm

Plate 2: Bonsai Training workshop at Ajnuj farm

While giving information about bonsai, Ms. Shailaja said that the art of bonsai originated in India and then spread to China and Japan. Chinese monks developed bonsai in monasteries as a spiritual practice to bring peace to Buddhism. 100-year-old bonsai can be found in Japan. 25 bonsai were produced through all the trainees by the end of the workshop. Participants were encouraged to make at least two more bonsai. Bonsai is a very old art. This art can be used to reduce stress in today's stressful life. Bonsai can be a great business considering the growing demand for beautification. The workshop aimed to inculcate a professional attitude among the students and develop their entrepreneur skills. Through this art we can meet our financial needs and we can use this art as a side business. After the program, everyone expressed their opinion. Dr.Kranti thanked everyone for coming and actively participating in the workshop

Datura metel

Datura metel (D. metel) is one of the widely well-known folklore medicinal herbs. The troublesome weed, D. metel is a plant with both poisonous and medicinal properties and has been proven to have great pharmacological potential with a great utility and usage in folklore medicine. D. metel has been scientifically proven to contain alkaloids, tannins, carbohydrates and proteins. This plant has contributed various pharmacological actions in the scientific field of Indian systems of medicines like analgesic and antiasthmatic activities.

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Plate 3: Bamboo Rakhi workshop

Bamboo Rakhi Workshop

On the occasion of Rakhi Purnima, a workshop was held at Vidyapratisthan Bhor English Medium School, Bhor to make eco-friendly rakhi from bamboo. On this occasion Mrunal Kale of Bamboo Tales was present with her team.

Ms. Mrunal gave a presentation on Bamboo's importance in India, its advantages, its usage, etc. She also showed students different artefacts that can be prepared using a bamboo and how sustainable idea this can be. Students were amazed by the ideas that were presented. They asked many questions and were curious to attend the workshop. Team of Bamboo Tales part by part demonstrated the audience and students started preparing the parts of Rakhi. Students thoroughly enjoyed the process of preparing the material for rakhi

NGCPR team and Bamboo Tales team were completely engrossed in the workshop and helping out the students in the step-by-step process. Some students came forward and greeted the vote of thanks to the team of NGCPR and Bamboo Tales for conducting this amazing workshop. Principal Madam was surprised by the response that this workshop gave. Students seemed to be happy and satisfied to have learned an eco-friendly Rakhi.

Ex-situ conservation of *Erinocarpus*- NGCPR Conservation Activity

Plate 4: Erinocarpus nimmoni

Flowering: September-November; peak blooming in October.

Fruiting: From end of September to June.

Occasionally found in isolated semievergreen and damp deciduous patches along the sides of rivers and streams. The only endemic tree genus, it is found in the northern Western Ghats the fibre from the bark is used to make rope, while the fruits' seeds and skins can be used to make natural dyes. Wood is also used to make charcoal and fuel. This plant has many medicinal uses as well. Seeds were collected from various regions of Satara, Maval and Bhor for experiments. Its fruits are spiny and have a hard coat. Every fruit have just one or two seeds which eventually makes their availability very less. Seed production and seed viability are the main issues faced while considering experiments on this plant species. Due to its hard coat, these seeds are given treatment to allow its germination. Chances of germination become less if the seed do not meet the standards for germination and its treatment. Since it is considered to be an endangered species according to IUCN status, it needs to be conserved. NGCPR being into conserving indigenous varieties of plants, treatments were given to the seeds of *Erinocarpus* and their saplings were prepared. Very few seeds germinated and they are now kept under observation. Ex-situ conservation of this plant is being carried out in one of the School in Bhor.

Strobilanthus Callosa

NAOROJI GODREJ CENTRE FOR PLANT RESEARCH,

NGCPR September 2023

NGCPR Project on Communication, Education and Public Awareness for Climate Action and Biodiversity Conservation

September Programs

- Ganesh Festival- Ecofriendly Decoration Sessions in Schools
- Bamboo Rakhi Workshop
- NGCPR Research on Abaai

Ganesh Festival Eco-Friendly Decoration Sessions

Ganesh Chaturthi is one of the most famous festivals in India, where Lord Ganesha is worshiped with great enthusiasm. The practice of immersing plaster-of-Paris (POP) idols in water bodies during the festival has raised concerns about environmental pollution. Accordingly, to solve this problem, eco-friendly Ganesha decorations should be used with emphasis on eco-friendly materials and methods. Eco Friendly Ganesha Decoration Competition was conducted from 19th to 26th September 2023 in various schools of Bhor and Khandala. The competition was organized by NGCPR. Raviraj Rainak guided schools on the importance of Ganesh Chaturthi and its relation to environment and announced competitions in schools. A total of 12 schools participated in this program. School students from class 5th to 10th from rural and urban schools participated in this competition. Participants were required to create eco-friendly Ganesha idols and decorations using eco-friendly materials like clay, paper, bamboo and natural colours. Environmentally friendly Ganesha idol made of clay, innovative and creative use of materials or techniques, extent of sustainable materials used, consideration of environmental impact during disposal.

1st prize- Aayush Santosh Gole,
Shri Samartha Vidyamandir, Kanheri

2nd Prize- Raut Dattatray Dhavlat
Panchakroshi Vidyalay, Lohamjawale

3rd Prize- Vedika Khapate
Madhyamik Vidyalay, Pisaware

Strobilanthes callosa is a shrub found mainly in the low lying hills of the Western Ghats, all along the west coast of India. This shrub belongs to the genus Strobilanthes. The genus has around 350 species, of which at least 46 are found in India. Because most of these species show an unusual flowering behaviour, varying from annual to 16-year blooming cycles, there is often confusion on the national scale about which plant is flowering. It mostly flowers between July to September. The shrub has an interesting life cycle; it comes alive and green every year with the advent of monsoon, but once the rainy season is over, all that is left is dry and dead-looking stems. This pattern repeats itself for seven years, but in the eighth year the plant bursts into mass flowering.



Students participated enthusiastically in this. The results of this competition were announced online. Through this competition, the use of plastic and Plaster-of-Paris (POP) in festivals has been reduced to some extent.

Bamboo Rakhi Workshop

Rakhi, also known as Rakshabandhan, is an important Hindu festival celebrated by people of Indian origin in India and around the world. Mrinal Kale and her bamboo team are experts in making eco-friendly rakhis. For this activity, we have chosen Vidyapratisthan New English School, Bhor, a school that actively participates in environmental work.

The Principal of this school welcomed the NGCPR team and Bamboo Tails experts. She introduced all the students and gave information about celebrating Rakhi Poornima. Ms. Mrunal Kale from Bamboo Tales gave a presentation on the importance of bamboo in India, its benefits, its uses, etc. She showed the students the various art work created using bamboo. The students were amazed by the ideas presented. Students were eager to attend the workshop and do the artifacts made out of bamboo.


The workshop was conducted in a hall where students can sit together and do the bamboo rakhis. A group of 2 students each was assembled and asked to work in teams and prepare as many rakhis as possible. The Bamboo Tales team demonstrated to the students part by part and the students started making the parts of the rakhi. Students thoroughly enjoyed the process of preparing materials for Rakhi. The NGCPR team and the Bamboo Tales team were fully immersed in the workshop and assisted the students step by step. Students created beautiful rakhis and were eager to tie or tie them to their siblings. The 3 students thanked the team of NGCPR and Bamboo Tale for coming forward and organizing this wonderful workshop. Principal Madam was surprised by the response to this workshop. Students seemed happy and satisfied to learn eco-friendly rakhi. The Bamboo Tales team was overwhelmed by the response from the students of this school.

NGCPR Research on Abaai pods

Common name Sword bean

Botanical name *Canavalia. Sp.*

This species was collected from the area of Jawhar-Mokhada. Sword bean is a tropical food legume which is underutilised. It is a vegetable and a fodder crop and is high in proteins. Sword bean is widely farmed as a crop for fodders in the peninsular and northern parts of India and the Eastern and Western Ghats of South India. Numerous advantageous



agronomic characteristics, including high biomass output, tolerance to pests, diseases, drought, good fertility index, and productive seed yield on fertile ground, enable them to thrive in tropical environments. Research and experiments were carried out to estimate the nutritional assessment, growth rate and checking overall seed variability to plan conservation strategy for the specie.

Compliance of SDGs with NGCPR Goals

Goal 13: Climate Action

Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning. Sessions on climate change, significance of different ecosystems have been taken in various schools of rural as well as urban setup.

Goal 15: Life on Land:

Promoting implementation of sustainable management for types of ecosystems, halt deforestation, and restore degraded forest substantially increase afforestation globally.

Goal 17: Partnership for the goals

Partnering with schools and colleges to educate, aware about conservation and sustainable environment practices

Gloriosa superba

October-November 2023

NGCPR Project on Communication, Education and Public Awareness for Climate Action and Biodiversity Conservation

<u>October-November Programs</u>

- Awareness Sessions in schools
- Workshops attended
- NGCPR Activity: -Research work on horse gram
- -Godrej's Photography workshop

Awareness Sessions

Session on Climate Change

Session on Climate change for 8th class of Delhi Public School was taken by Ms. Radhika Jagtap on 9th October 2023. Session was held to address the topic of "climate change and its adaptations & solutions" Concepts of global warming, greenhouse gases, the Paris agreement, SDGs, adaptation and solutions were addressed in the session. Later, Plantation of medicinal plants in their garden took place with NGCPR team and Principal, teachers and students of DPS.

Session on Scope of Botany in Industrial Area.

Mr. Rohit conducted a session on 'Scope of Botany in Industrial area' in Balwant College, Vita. He guided students about different types of jobs available in corporate, government sector as well as informed about entrepreneurial skill development workshop for starting their own businesses. He informed about internship available by government and various other organizations that are working towards environment, climate change, sustainability and conservation of biodiversity. Different entrepreneurial workshops such as Bonsai, Nursery, Bamboo crafts, best out of waste, plastic recycling, upcycling and sustainable products.

Plate 1: Ms. Radhika conducting a session on Climate change and its adaptation, mitigation & solutions in Delhi Public School, Pune

Gloriosa superba is a species of flowering plant in the family of Colchicaceae. It is commonly known as flame lily, climbing lily, creeping lily etc. It is a medicinal climber and an Ayurveda herb to cure diseases. Tubers of this plant contain an important secondary metabolite known as colchicine, which is used to cure snake bite, ulcer, leprosy, skin diseases and arthritis. This Colchicine for its properties was traded earlier in Western Ghats, leading to decline in its population and entering into red data book.

Plate 2: Principal, teachers & students planting saplings and Mr. Rohit addressing some key points

Plate 3: Students planting trees

Plate 4: Mr. Rohit conducting workshop on Scope of Botany in Industrial area in Balwant College, Vita for BSc students

Plate 5: Students attentively listening to the session

Attended Workshops

Re-charkha Visit: Recharkha is an organization working for environment by converting plastic waste to handbags, pouches, wallets etc. NGCPR team visited their production place at Bhor and later to Store at Karvenagar. People from all over India, send their plastic waste to get upcycled products. They believe in bottom up development, which means sustainable development is possible only when it begins at the grassroots and involves an empathetic understanding of the other biotic and abiotic communities.

Plate 6: Visit to reCharkha organization to learn about upcycling plastic waste

Expo Visit: Mr. Raviraj Rainak attended Nature walk exhibition at Karve-nagar which was arranged by Anuj Khare. Various sustainable, eco-friendly products providing organizations had their display at this event. Bamboo handicrafts, plastic upcycled bags, clay jewellery, ecofriendly bird house, upcycled jeans bags, app for photography, jewelry from eco-friendly material etc. It was thrilling to see various different kinds of products that can be replaced with our daily plastic products to live sustainable life.

Pottery Visit: Visit to Mr. Brahmdeo Pandit, a Padmashri awardee took place on 11th October 2023 at their place in Mira-Bhyandar. He himself and his family along with workers runs the business. He founded the studio in 1981 and has established a huge fame due to his passion for pottery. Whole family is engaged in this business and work devotedly.


Plate 7: Visit to Brahmdeo Art Creations



Plate 8: Visit to exhibition of eco-friendly products

NGCPR Activity

Godrej's Photography Workshop

Godrej Communication team from Vikhroli visited NGCPR with 27 participants who had won different competitions conducted by them. It was accompanied by an expert Wildlife photographer Ms. Aishwarya Shridhar who guided them to take best possible pictures using a cellphone. First they visited Ajnuj and later NGCPR. Dr. Kranti took them on a nature trail and showed various different types of ecosystem, tree species and birds present at Ajnuj. Later, they visited NGCPR lab at Shirwal. Dr Datir explained them about the seedbank and herbarium. Tour to nursery was then taken by Mr. Rohit, explaining different kinds of nursery and Nakshatravan



Plate 9: Godrej's Communication team with participants who won different competition at Ajuj learning photography skills from Ms. Aishwarya Shridhar

Research on Horse gram

Horse gram, also known as *Macrotyloma uniflorum*, is a type of legume that's native to certain parts of Southeast Asia. Notable for its dry, hard texture and unique flavor and aroma, horse gram is considered a staple in many cuisines. Horse gram is known as kulit in Marathi ((हुलगा,कु ळीथ). It is nutritionally important legume crop. It is used to feed horses, so the name horse gram. Horse gram is rich in nutrients, including protein and fiber. Some studies suggest that it may promote weight loss and improve heart health, but more research in humans is needed. Soil salinity is a major component that affects the yield and quality of horse gram. Research on effects of different levels of NaCl on two horse gram genotypes is under investigation. These two genotypes were collected from Konkan region. Biochemical studies are under investigation based on which genotypes can be classified salinity tolerant or susceptible. Ayurveda strongly suggests several formulations where horse gram is used as a key ingredient for its indispensable medicinal value such as Kulathadhi kashaayam that has been used extensively in treating health anomalies. More research is much needed.

Plate 10: Horse gram

Plate 11: Treatment given to horse gram seeds

Plate 12: Horse gram germination after biochemical treatment

Compliance of SDGs with NGCPR Goals

Goal 4: Quality Education

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

Goal 13: Climate Action

Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning. Sessions on climate change, significance of different ecosystems have been taken in various schools of rural as well as urban setup.

Goal 15: Life on Land

Promoting implementation of sustainable management for types of ecosystems, halt deforestation, and restore degraded forest substantially increase afforestation globally.

Goal 17: Partnership for the goals

Partnering with schools and colleges to educate, aware about conservation and sustainable environment practices