



**Fergusson College (Autonomous), Pune  
Internal Quality Assurance Cell**

**Best Practice I**

**Title of the Practice: Mapping Campus Biodiversity.**

**Goal:**

- Create awareness about importance of campus biodiversity.
- Equip students to use various research techniques in biodiversity studies.

**The Context:** India is a signatory to the International Biodiversity Convention and is bound to document and preserve biological diversity of the country. The Fergusson College campus is rich in biodiversity with a variety of habitats.

**The Practice:** As an attempt in this direction, some students under the Rangers' Eco club have been monitoring the biodiversity on the Fergusson college campus and the hill since 2008. The college has a large campus with a rich floral diversity. The major habitats on the campus include hill top, hill slope, plantations, gardens, open spaces and buildings. Many teachers and students from Zoology, Botany, Geology, Environmental Science and Geography departments have been working on various biodiversity related topics based on the campus, as a part of the UGC- CPE activity. Many teachers and students have been studying, watching and photographing the biodiversity on the campus and the hill on a regular basis as a hobby. Botany and Zoology students are regularly taken to the college hill as a part of the curricula (study visit) for floral and faunal surveys.

**Evidence of Success:** Some of results of such studies are as follows:

• **Floral diversity**

The campus is quite green with a diversity of trees. About 200 plant species have been enumerated on the campus by earlier teachers and students. Mr. Ashish Nerlekar, a past student has been monitoring the campus flora since 2014.

• **Faunal diversity**

(a) **Invertebrate diversity**

The spider survey was conducted by Mr. Ashwin Varudkar, a 2014 BSc. (Zoology) batch student. He collected information on more than 60 species of spiders from the campus. He also developed a photography album on the butterflies on the campus.

(b) **Vertebrate diversity**

Every year students of the Rangers' club, conduct a 'bird transect' (belt) across the campus during the winter months and document campus diversity. A group of students participated in the "Back-yard bird count" in February 2015 and reported 60 species from the campus. The data have been uploaded on the "www.e-bird.org", a website maintained by the Cornell Lab of Ornithology and National Audubon Society, USA.

Many students have been working on different aspects of the campus biodiversity as a part of the CPE-UG projects. Students have also been monitoring butterflies and spiders of the campus. They have added other faunal groups like mammals, bats and reptiles. The outcome of the survey may be summarized as follows:

<b>Type of life group</b>	<b>Number of species</b>	<b>Students and Teachers who collected the information</b>
Spiders	60	Warudkar (2013)
Butterflies	90	Warudkar & Patankar (2013)
Reptiles	19	Warudkar & Nalavade (2014)
Amphibians	05	Warudkar(2014)
Birds	105	Raut et al (2012)
Mammals	11	Warudkar and Salve (2014)

The survey findings and estimates of campus biodiversity have also been published in conference proceedings and in reputed national journals.

### **Projects on Biodiversity under UGC- CPE Scheme**

<b>Sr.No.</b>	<b>Title of the Project</b>	<b>Names of Students</b>
1.	Study of Diversity and Urbanization of Spiders of Fergusson College Campus.	Ashwin Warudkar
2.	Study of Birds and bird habitats of the Fergusson College campus.	Samrat Salve and Ashish Raut
3.	Study of Diversity of Wild Mammals of Fergusson College Campus.	Samrat Salve and Ashwin Warudkar
4.	Algal Diversity of Fergusson College, Pune	Ms. Vividha Raunekar, Ms.Shubhangi Raskar, Rushab Rathod and Digvijay Patil
5.	Mapping of Rare Species on Vetal Hill	Akshay Onkar
6.	Documentation of the Butterfly Species found in Fergusson College	Ms. Anushka Rege
7.	Angiosperm Diversity of Different Habitats in Pabe Ghat near Sinhagad, Maharashtra	Ms. Rutuja Barate
8.	Herpetofaunal Mortality Due to Vehicular Movement in Tamhini Ghat, Northern Western Ghats, maharashtra	Anish Pardeshi
9.	Diversity and Distribution of Aquatic Insects in Pashan Lake of Pune, Maharashtra	Ms. Ramya Roopa
10.	Mapping the roosting colonies of Flying fox bat around Pune	Ashwin Warudkar and Gaurav Kalyani

## Best Practice-II

### 1. Title of the Practice: Fostering Social Responsibility

### 2. Goal

- To instill a sense of social responsibility in students.
- To engage the students in meaningful service that meets community needs.
- To equip the students with skills, attitude and knowledge to work with the disadvantaged sections of society.

3. **The Context** : The purpose of education is not just preparing the students for a livelihood but also to make them good citizens and above all good human beings. Values of caring and sharing with the less privileged are one of the important elements of such education. It is our collective responsibility to empower the underprivileged to become self reliant so that they can live with respect and dignity. It is our duty to uphold the human rights of all disadvantaged sections of society. Our college encourages a lifelong ethic of community service.

## Practices

- The college has a Social Outreach & Enabling Centre which gives an opportunity to the students to work with various civil society organizations. Around 300 students work with children from the underprivileged communities, on women's issues, de-addiction and counseling, children with disabilities, environmental issues and human rights issues. Broadly the work includes conducting surveys, organizing awareness campaigns, counseling, assisting teachers in day to day activities & during school annual days and other functions, conducting art and craft workshops, organizing clothes, toys and book collection drive and administrative work.
- We work with 15 civil society organizations namely KKPKP(*Kagad Kach Patra Kashtakari Panchayat*) – a waste collectors' organization, Ankur Vidyamandir – an inclusive school, Doorstep School – a school for the underprivileged children, Aalochana – a women's documentation centre, Vanchit Vikas –an organization working with urban poor, hawkers, sex workers and their children, Prism Foundation – an educational organization working with children with special needs Santulan – a drug de addiction centre, Mook Badhir Shikshan Kendra – a school for deaf and mute children, Department of Social Initiatives- Forbes Marshall, Hutatma Rajguru School – a neighbourhood school for the underprivileged children, Tathapi – a women's organization working on the issues of women and health, Sant Ramdas School – a Pune Municipal primary school, Deep Griha Society – an urban community centre, Aakansha Foundation and Green Campus Initiatives. Saathi is another initiative to integrate students with blindness into the college main stream. This is achieved through several activities like peer mentoring, self improvement workshops and participation in regular college activities and annual celebration of Louis Braille Day.

- **International Students' Facilitation Centre:** Fergusson College has always been one of the most popular destinations for international students in Pune. Presently, there are 269 students from 36 countries in the college. The International Students' Facilitation Centre addresses the needs of international students and helps them adapt to the college milieu.

The activities of the Centre include Orientation programme, tour of Pune city to places of cultural and historical interest, film screenings, student presentations on their respective countries, interaction with past international students of the college, communications skills' workshop. The highlight of the centre is the annual cultural programme, Panorama. It has been one of the major attractions amongst the cultural festivals in the college during the last 8 years. What makes this programme distinctive is that the flags of all the countries form the backdrop on the stage and the programme ends with the singing of the national anthems of all the participating nations.

4. **Evidence of Success:** The press has given coverage to the work done by the social outreach and enabling centre. Also several NGOs approach us for volunteers. The students have benefited a great deal. It has given them confidence in working with the community. It has been a process of self discovery for many.

The International Students Facilitation Centre has helped in bridging the gap between the international students and the teachers / administration and in building camaraderie amongst the students.

### **Best Practice III**

1. **Title of the Practice: Towards Gender Equality**
2. **Goal**
  - a) To sensitize the students to various dimensions of gender discrimination.
  - b) To engage the students in activities that would empower them to work towards a gender just society.
3. **The Context:** There is an alarming rise in violence against women. No society can claim itself to be developed if half its populace is deprived of a dignified existence. As citizens of India it is our primary duty to uphold the values of equality, liberty, justice and fraternity enshrined in our Constitution.
4. **The Practice:** Fergusson College is committed to the cause of gender equality and has been undertaking several programmes towards this end. They are academic, awareness and action oriented.

### **Academic Oriented Programmes**

- **Certificate course in 'Women and Development':** This is a three month part time certificate course conducted by Women's Studies Centre, SSPU, Pune which we have been conducting for the past 8 years. This has received an overwhelming response from students.

- **Student Research Projects:** 8 short term student research projects on gender issues have been undertaken so far in collaboration with some of the pioneering women's groups in Pune like Aalochana, Tathapi and SWaCH. The research projects are: capacity building for women in Water Users' associations in collaboration with SOPPECOM (Society for promoting participative ecosystem management), rural deserted women in Bahe in collaboration with SOPPECOM, mapping child care in the area of Kalakhadak slum, PCMC in collaboration with TATHAPI; resource base on 'gender'; 'The working of CASH (Committee against sexual harassment) in Pune colleges; "Waste, waste-pickers and their lives"; case studies of waste collectors; survey on sexual harassment and portrayal of masculinity in Bollywood cinema.
- **Workshops/Seminars/Guest Lectures:** These have gone a long way in creating awareness about gender issues. 20 workshops, seminars and lectures have been organized on issues of gender violence, legal literacy, engendering governance, sexual harassment, masculinities, queer politics and women and developmental issues.
- **Paper Presentation by Students on "Studying Gender: Experiences and Reflections"** at a National Seminar on "Interrogating Gender Studies: teaching, research & practices in Sociology and other disciplines" organized by Department of Sociology, SPPU Pune.

#### **Awareness Oriented Programmes**

**Street Plays and Poster Exhibitions:** We have 150 posters and 5 street plays that have been performed on several occasions. Street plays like *Ansuni Awaaz* on issue of sex selective abortions, *Chedkhani Band* on sexual harassment, *Nirbhaya* on violence against women, *Azadi* on breaking free from the shackles of patriarchy, *Bas Ab Aur Nahin* on dimensions of gender discrimination and way towards equality were very well received.

**Forum for Gender Equality:** This is an active students' forum and its activities include weekly discussions, film screenings, awareness campaigns, conducting surveys, poster exhibitions and street plays to spread the message of gender equality. This year it conducted a survey on sexual harassment and a campaign on menstrual hygiene.

**Independence Day (August 16, 2012): Theme "Women Hold Half the Sky".** A poster exhibition was held depicting different forms of discrimination against women, gender stereotypes and dimensions of violence against women. Film screening of "Bol" on domestic violence, street play – *ansuni awaaz* on the issue of female foeticide was performed.

**International Fortnight (Nov.25 to Dec.10) to Stop Violence against Women** is observed as the International Fortnight to Stop Violence against women. Activities are organized in collaboration with different women's groups.

**Participation in "One Billion Rising"** (February 14, 2013): This was a global event organized to protest against the growing violence against women. In Pune the theme

was '*saat nantar ghara baher*'- making public spaces safer for women. Our students participated in this.

**World Human Rights Day – Women’s Human Rights** (December 10, 2011): The Sociology Club celebrated this day by having a quiz on women’s human rights, poster exhibition, group discussion on ‘right to the city’.

### **Best Practice-IV**

#### **1. Title of Practice: Fostering Active Learning Strategies in Teaching-Learning**

#### **2. Goal**

- To equip students with techniques/ use of technology.
- To instil sense of research in undergraduate and post graduate students through project- based learning.
- To equip students with interdisciplinary knowledge and enhance their knowledge base.
- To promote interaction with subject experts, scientists, academicians and industry experts.
- To make students employable and industry ready.

#### **3. The Context**

Higher education demands overall growth of the students and provide them learning opportunities and make them employable. It is not always possible to enrich curricula with all the knowledge and expertise needed for their academic progression and move towards internships and lead to placement opportunities. Hence, additional efforts by the higher educational institutes are essential to equip students and make them aware of new technologies and hands on experiments. Interdisciplinary learning is also needed to cater to industry needs.

#### **4. Practices**

The College/ departments organizes Hands on training sessions with the help of industries and research institutes and other higher educational institutes which help students in increasing their knowledge horizons and in a way equips them new techniques. Project based learning has been practised by the college over a long period of time in both the faculties, which has promoted sense of research among the students. Workshops on interdisciplinary areas especially on learning new techniques/software’s/technologies has provided an edge for our students and resulted in better placement opportunities. Learning and interacting with meritorious alumni and few sessions with present students has helped in grooming of students and helped in understanding new avenues/requirements in industries, research institutes and also in International Universities.

#### **5. Evidence of Success**

The overall impact of above -mentioned efforts has helped students and teachers to go beyond the curriculum and learn beyond the scope of the curriculum. Regular interactions with experts, scientists have helped students in widening their scope of

learning. Apart from this, Career Summits and Sectorial Summits conducted in collaboration with recruiters and industries and industry HRs has paved way for both students as well as teachers in understanding industry needs and bridging the gap between academia and industries. Hands on training sessions especially for undergraduate students has equipped them in practically doing certain experiments/ techniques used in research institutes as well as in industries. Project based learning has given students an opportunity to do research, write papers and publish and in many cases, present their work in conferences. Learning of softwares/programmes like ‘R’ programming, “PYTHON” programming for life students has helped them to analyse data generated through research projects and provided an understanding of presentation of scientific data.

### **Best Practice-V**

#### **5. Title of the Practice: Diversification of Social Outreach Activities and Fostering Social Responsibility**

#### **6. Goal**

- To instill a sense of social responsibility in students.
- To engage the students in meaningful service that meets community needs.
- To equip the students with skills, attitude and knowledge to work with the disadvantaged sections of society.
- To diversify social and outreach activities and reach school education
- To foster reciprocal learning where both the students and the recipients of service benefit from the activity.
- To encourage a lifelong ethic of service in students.

7. **The Context:** The purpose of education is not just preparing the students for a livelihood but also to make them good citizens and above all good human beings. Values of caring and sharing with the less privileged are one of the important elements of such education. It is our collective responsibility to empower the underprivileged to become self-reliant so that they can live with respect and dignity. It is our duty to uphold the human rights of all disadvantaged sections of society. Our college encourages a lifelong ethic of community service.

#### **8. Practices**

The college has a Social Outreach & Enabling Centre (SOEC) which gives an opportunity to the students to work with various civil society organizations. There are around 8 active organizations working under SOEC. They work for different causes and have different mottos. There are organizations working for blind students specifically and working for learning disabilities like Ankur and Prism. There are organizations working to educate the children from Below Poverty Line families like Doorsteps. There are multitasking organizations like Sevashayog working for more

varied causes like women emancipation, menstrual hygiene and education. Muse, which is situated out of Pune, actively works through video calls.

Apart from the above, the College has been awarded with DBT STAR College Scheme. Eleven science departments are beneficiaries under this scheme. Every department carries out atleast one outreach activity under this scheme. The outreach activities carried out vary from poster exhibitions for general public, exhibitions on Scientist like Dr. APJ Kalam, Statistics in Army/ War/ How Alan Turing used Statistics and German's Lost, Big Data Analysis (How Statistics is used in Internet.), Workshops for school teachers teaching Biology and Geography introducing teachers to Earth and Solar System, Evolution of the Earth and Topography and Landforms, hands-on training on Maps and Toposheet reading and on minerals, rocks, fossils and rock thin sections, workshop on 'Introduction to the Exciting World of Microbiology' for high school student, where the number of students benefitted is more than 200, workshop on 'Understanding life-style diseases using Clinical biochemistry for high school teachers' and Three-day programme on 'Popularization of Science' which included lectures by eminent scientists on various topics and hands-on session on the use of scientific toys made from simple daily use objects to demonstrate the principles of Science were conducted.

9. **Evidence of Success:** This has helped the College in reaching out to the community which needs education, help rendered by our student volunteers has been solicited by the NGOs and Inclusive Schools. The press has given coverage to the work done by the social outreach and enabling centre. This has also helped in significant number of NGOs approaching the College/ SOEC to get support in the form of student volunteers and now the College is entering into formal MoU's with these NGOs/Schools. The students volunteering such outreach activities are awarded extra credits for participating in SOEC activities and their work is getting evaluated as well as appreciated.

## **Best Practice-VI**

1. **Title of the Practice: Efforts for Differently abled students – SAATHI Enabling Center**
2. **Goal**
  - To help and support students with blindness
  - To equip these students with skills needed for their academic and career progression.
  - To help them evolve and bring them in main stream on par with their counterparts.
3. **The Context:** SAATHI Enabling centre has been established in the College. The objectives of this Center are to promote and help disabled students especially those with blindness. The center works for disabled students in their study and personality

development. SAATHi also helps in identifying their skills, quality and abilities in them. As a part of their activities specifically for developing their academic abilities, the Center organizes various programmes and activities which include workshops, lectures by eminent persons for their overall development. SAATHI also provides study material for these blind students in form of recording of books prescribed in their curriculum. SAATHI provides writers for their exam and assigns student volunteers (called as peers) who help them in their office related work and their routine movements in the college campus. SAATHI also organizes local trips in nearby areas, which help them to build a friendship bond with other students.

#### **4. Practices**

The SAATHI Enabling Center conducts following activities and programmes for students with blindness.

- Computer training classes with dedicated computers with JAWS software.
- Painting Exhibitions for blind students- ‘Closed Eyes and Open Minds’.
- Sports competition like Chess.
- Scholarship for blind students – Given by Chennai Foundation
- Celebration of ‘Braille Day’
- Trips to nearby areas like Junnar, Shivneri Fort, Kolaba Fort, Kankeshwar Temple, Sri Ballaleshwar Ganpati Temple, Pali and Akshi Beach, Alibaug.
- Guest lectures and programmes like “LAKSHYA” for orienting blind students for competitive examinations.
- Virtual Study Circle, is an ongoing activity between student volunteers/peers and blind students where they engage themselves every week in academic discussions from exam point of view.
- A new initiative called, “Let's Record”, [the first Audiobooks' Website of SAATHI, [www.vargshikshak.com](http://www.vargshikshak.com)] has been started when a countrywide lockdown was announced in India, It allows people from all around to record books for the blind students to help them pass their time during the period of lockdown and after knowing the importance of our Initiative, it was covered by well-known Times of India Group on 30 May 2020, in their issue.

#### **5. Evidence of Success:**

All these activities have helped blind students to learn in academics as well as in their routine life and has created a sense of belongingness in them. The center has provided a conducive environment to promote the overall development of these students. Few achievements are, SAATHI, was awarded Drushti Sanman Puraskar" by Drushti NGO on 16th Feb, 2018.our students, Aniket Bende (TYBA) has won gold medal in international Olympiad of Performing Arts organised by Akhil Bhartiya Sanskrutik Sangha at Dubai. Laxmikant got selected as probation officer in State Bank of India, Sanjeet Hoskoti (TYBA) wrote his own book named ‘My experiences and feelings of a dog’ in English.