

Shri Shivaji Education Society, Vidyanagar, Karad  
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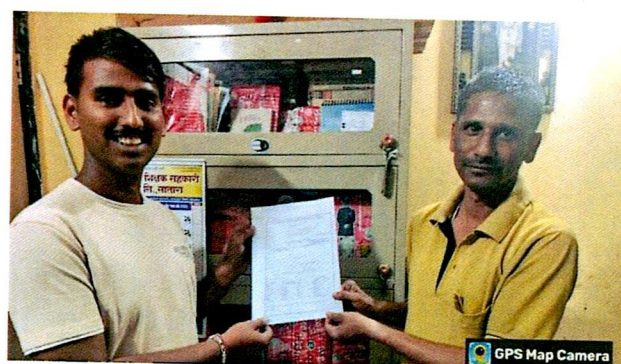
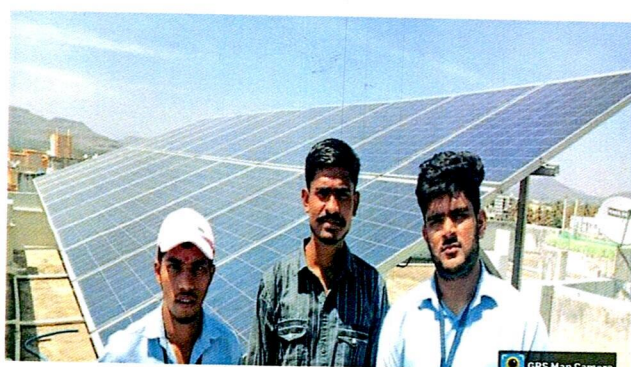
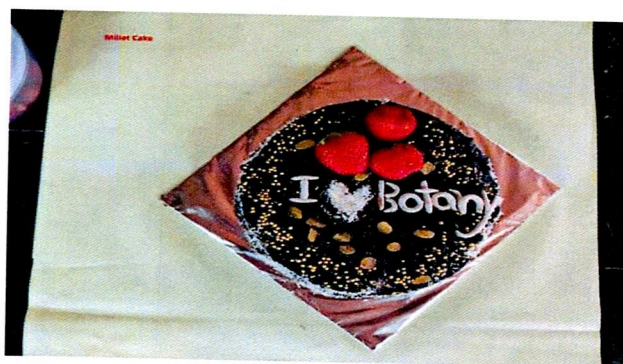
## **Yashwantrao Chavan College of Science, Karad, Dist. Satara (MH), India-415 124**



### **Criterion VII**

### **Best Practices - I**

### **Exploring Science Frontiers - Lab to Land**







### ➤ **Title:**

Exploring Science Frontiers - Lab to Land

### ➤ **Objectives of the Practice:**

- To built interest amongst students for applied science.
- To train students and educate them by arranging various activities and hands on regarding lab and land work.
- To implement the lab skills on land to generate benefit out of gained knowledge.
- To make everyone aware of modern and applied science.
- To benefit the society with modern scientific solutions.
- To build scientific thinking among students so that they can tackle the problems which society is been facing.

### ➤ **The Context:**

Arts keep us connected with the past, Commerce takes care of our present needs and Science takes us to the future. As the name of our practice suggest, Science is always been to frontiers position. Yashwantrao Chavan College of Science, Karad is always leading in science related activities and encourage youth to speak with facts, as Science always argues with facts rather than ideologies. Institute was one of the first Science Institute of Karad and is leading over the decades. Stakeholders and Institute staff always encourage students to find out the solutions to problem in a scientific and effective way. Prime focus of Institute is to implement the knowledge gained in lab onto the field i.e. land. The activities are conducted in forms of seminars, hands on, energy saving campaign, food festival, recipes and much more by different Departments. Thus, implementing the knowledge gained to help our society grow is the best service to the wisdom and the Nation.

### ➤ **The Practice**

This practice is been implemented in collaboration with all the Departments in the Institute.

#### **1. Food Festival**

The department of Microbiology and Biotechnology organized a Food Festival event for students to learn about fermented food preparation and its value. Students were guided by faculty members in product selection and preparation, and showcased their products at an expo. The event aimed to stimulate creativity, enhance knowledge of fermentation processes, and motivate students to start their own start ups.

#### **2. Millet Festival**

Department of Botany organized Millet festival on occasion of International Millet Year 2023. We focused to highlight millet as Super food and throw lights on its nutritional values and distribution across India. Students prepared seed art using millets and also prepared delicious recipes using millets.

### 3. On Field Water TDS (Total Dissolved Solids) Checking

Increased awareness about water quality, particularly TDS, can improve public health outcomes. Assessing water quality can help identify potential health risks, leading to healthier water supply. Addressing water quality issues can also enhance community resilience to water contamination or scarcity. Public relations efforts can enhance the organization's commitment to community well-being.

### 4. Soil Analysis

Soil carbon and nitrogen measurements are crucial for agriculture, impacting fertility, nutrient cycling, and crop productivity. They can be applied in land management, sustainable agriculture, and environmental conservation. Understanding pH principles is also essential for understanding biological processes. This knowledge can be applied in real-world scenarios, contributing to carbon sequestration and mitigating climate change effects. So, the department of chemistry took the initiative to analyze the soils as per the needs of local farmers.

### 5. Energy Saving Campaign

The Electronics department is conducting an energy-saving campaign. Its goals are to educate the public about appropriate energy-saving measures, control local villagers' electricity bills by lowering their consumption, promote the use of highly power-efficient electric and electronic equipment, and promote the use of renewable energy sources. Students and staffs went door-to-door to visit people's homes and entrepreneurs and gave them advice on energy conservation. The people are supportive of energy conservation and give the students great comments.

### 6. Kisan help desk

Department of Computer Science run this help desk for farmers. Due to changing technology and complexity, farmers miss out the government schemes and fail to apply in prescribed format. To deal with this issue our students help farmers and guide them to grab those schemes. Students show active participation and complete the given task to help farmers at their level best.

### 7. Renewable Energy Awareness Campaign

Department of Physics took the initiative to spread awareness regarding renewable energy resources using graduate students. Staff allots the students according to their area of interest. Students spread information and importance regarding renewable energy sources like solar, wind, hydroelectricity etc. over non renewable ones like fossil fuels.

### ➤ Evidences of Success

- The practices run in lab were implemented in real world i.e. land.
- Ideas regarding startups were built in mind of students.
- Active participation of students in programs and workshops is the biggest successes to the institute.
- Spreading awareness and importance of traditional food (Millets) in diet of modern world youth.
- Students unlocked new streams and career opportunities.





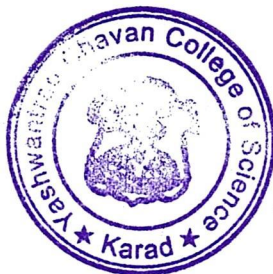
- Proper utilization of household waste and Institute waste in creative way.
- Farmers got proper channel to take advantage of government schemes.

➤ **Problem encountered resource required**

- Getting an excellent resource person every time is quite difficult task.
- Lack of awareness amongst local people makes it difficult for implementation on large scale.
- Practices like door to door survey not always happen as it's planned.
- People do not always treat well to the questions.
- Involvement of NGOs can put a driving force in such activities.



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**Principal**  
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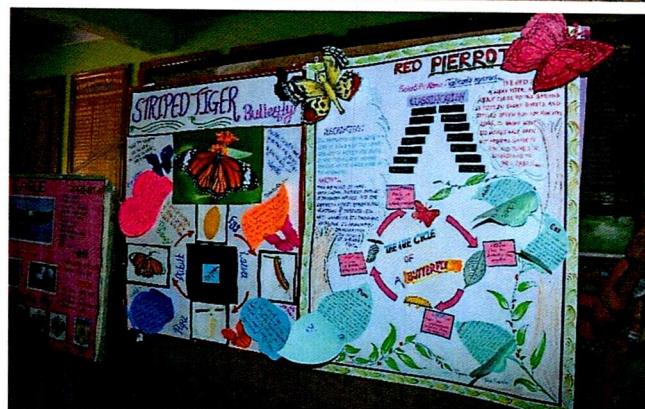
## Yashwantrao Chavan College of Science, Karad, Dist. Satara (MH), India-415 124



### Criterion VII

### Best Practices - II

### FFF: Flora Fauna for Future







➤ **Title:**

**FFF: Flora Fauna for Future**

➤ **Objectives of the Practice:**

- To conserve Flora and Fauna for future.
- To spread awareness amongst youth regarding flora-fauna and its restoration.
- To understand importance of recycling and upcycling of plastic and other non degradable material.
- To implement actual solutions for global warming and environmental degradation.
- To focus on indigenous and keystone species plantation.

➤ **The Context:**

Flora and Fauna are the most important components of our ecosystem and lifestyle. Conservation of both for the future perspective is our whole and sole responsibility. (That's how the name was coined Flora Fauna for Future i.e. FFF).

Plants are one of the most beautiful creations of the god. They help the whole fauna including humans in building their lives. Plants provide us all for our betterment without any own outcome. Therefore, it is important to save the scenic beauty of our earth. On the other hand Fauna plays a vital role in building biota and food chains. Both Flora and Fauna act as Keystone species in many cases, where there is no existence of fauna without flora and vice versa. Therefore, it is important to save both Flora and Fauna at our levels to save our own ecosystem and existence.

This practices is been implemented in collaboration with-

- ❖ Eco-club
- ❖ Eagle Nature club
- ❖ Green club
- ❖ NSS and NCC
- ❖ Institute Departments

➤ **The Practice:**

**1. Indigenous tree plantation**

We focus on plantation of indigenous plants rather than introduced and exotic ones. Apart from campus we have planted trees in Banawadi, Government College of Engineering campus, NSS program collaborations, Kival and many more. The main reason to do so is to provide the best possible and familiar habitat to planted trees.

**2. Plant donation**

Institute is actively involved in plant distribution and plantation. Institute runs this activity every year and donates plants to municipal corporation, schools, colleges and different institutes. Number of groups is involved in the activity and these groups have a responsibility to donate the plant and make them grow.

### 3. Eagle Nature Club

Every year in the first week of the October wildlife week is celebrated and is organized by Eagle Nature Club. During this program various poster competitions, lectures or film shows are organized for students. Youth is taught how can we protect and nurture our wildlife.

### 4. Spreading awareness

We conduct awareness programs for regarding nature restoration and conservation. As our practice name is FFF, we focus all every aspect related to flora and fauna for betterment of future. We arrange guests lectures, workshops, poster presentations, model making and rangoli competitions.

### 5. Eco-friendly rakhi

Students and staff members actively participate in this activity. We arrange workshops and rakhi making competition for students.

### 6. Recycling and up-cycling of waste

This activity is run under collaboration of both Eco-club and Eagle Nature club. The main focus is on plastic and its other derivatives. We arrange workshops and model making competition out of waste.

Department of Biotechnology organises this nature friendly activity. Students use waste material like thermacol, plastic bottles, used papers and other waste stuff. They make decorative idols, show pieces, home décor items in these activities. Main focus of this activity is to use waste material as an opportunity to make something best out of it.

### 7. Vermicomposting

Department of Zoology runs an add-on course to train students in vermicomposting. Campus botanical garden has a separate vermicomposting unit in which students prepare vermicompost from wet and dry organic waste collected in campus. Prepared compost is utilized in plants in campus rather than using chemical fertilizers.

Institute runs a short term course to train students in vermicomposting. Campus botanical garden has a separate vermicomposting unit in which students prepare vermicompost from wet & dry organic waste collected in campus. Prepared compost is utilized in plants in campus rather than using chemical fertilizers.

### 8. Eco-Friendly Ganesh Utsav:

Eco-Club actively participates in celebrating Eco-friendly Ganesh Utsav every year. Students spread awareness to use shadu clay instead of synthetic ones and hazardous colors on idols. Main purpose of this activity is to stay aware of environmental problem and find better solutions for it.

#### ➤ Evidence of Success:

- All the activities under the practice are run each year with new theme.
- Active participation of students and implementation of knowledge gained is our success.




- Students spread awareness with their neighborhood and society via rally and other stuff such as poster and model preparation.
- Planted spots are visited frequently to check growth status. The main intention is to convey the message of flora fauna and future.

➤ **Problems Encountered and Resource Required:**

- Conservation of flora is possible as compared to fauna.
- Fauna restoration is not that easy to implement.
- Lack of awareness amongst local people.
- Large plantation drives need manpower and time to time surveys.
- Collaboration with big NGOs can change the game for institutes like us and many others.



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