

Following the vision and mission of the institution, two best practices implemented by the institution are:

- **Teaching-learning methodology: 'Pawan Pattern'**
- **Society-oriented activity: Bee with the farmers**

Best Practice-I

1. Title of the practice: Teaching-learning methodology: 'PAWAN PATTERN':

2. Objective of the Practice:

- ✓ Improvement of students' performance through participatory and experimental learning process by providing a conducive environment to the students of rural area to acquire knowledge-based education.
- ✓ To provide platform to the students belonging to middle-class families for their holistic development and to guide them for their career path.
- ✓ Aimed to encourage the students for participation in various academic and co-curricular activities.

3. The Context:

To promote the academic talent among students of in the institution through continuous monitoring and evaluation by conduction of unit tests, terminal examination, student's seminar, group discussion, home assignments and supporting them through mentoring process, helping them to build up confidence.

4. The Practice:

The institution follows transparent admission process and students are admitted on merit basis, as per the university guidelines. Admission committee not only scrutinize the received applications of the students but also provide detail information of admission schedule, procedure and the availability of seats in different courses. Newly admitted students and their parents are invited for Principal's address after the completion of admission process. Both parents and students informed about teaching-learning process, content and scope of the courses, evaluation process and different facilities available in the institution through the presentations by IQAC and departmental profile by HODs.

Activities conducted during first fortnight of commencement of teaching are the organization of performance test for newly admitted students, revision of subject knowledge and identification of slow and advanced learner. Students are provided with notes and study material in hard or soft copies. CME includes conduction of internal examination and timely evaluation. Student's performance is assessed through unit tests, group discussion, student's seminars, assignments and interaction in the classrooms. IQAC organizes MCQ based performance test on curriculum of qualifying examination. Evaluation of internal examination and assignments is carried out in schedule time and answer sheets all internal examinations are returned to students with specific endorsement. Students are informed well in advance, about the terminal examination, to be conducted by examination committee before final examination. Student's attendance is regularly monitored. It is mandatory for every faculty to conduct the unit tests after the completion of each unit. Slow learners are given special attention. The students are also prepared for viva-voce in university practical examination. Each department organizes the remedial classes as per schedule given by IQAC. Advanced learners are encouraged for acquiring higher education and guided for competitive examinations by Career Counseling Cell. In

order to inculcate research aptitude among students, final year students are assigned to submit the survey-based project report under supervision of regular faculties. Learning experience of students is heightened through experimental and participatory teaching-learning process by organization of field and industry visits. Students with outstanding performance are felicitated at the appropriate place.

5. Evidence of Success:

- **Result improvement:** Improvement in the academic performance of the students seen in university results.
- **Confidence boosting:** Personal counseling and organization of remedial classes have yielded in improvement in academic performance of the students
- **Ranking in university examination:** We have been able to create healthy environment in and off the campus that exhibited the excellence performance of the students. Average students admitted at the entry level have ranked in the university examinations and are toppers from the district.
- **Career prospective:** Career guidance provided to the students have resulted in encouraging the students to move for the preparation of competitive examination
- **Progression to higher education:** Encouragement of the students have resulted in progression of the sizable number of students to higher education

6. Problem Encountered and Resources Required:

- **Students from low-income families:** Being working in remote area, we have enrollment of the students from poor and low-income groups and hence we have restriction of offering self-financing courses. Students from economically weaker sections could not afford the paid education and costly study material.
- **Language barrier:** English language has found to be barrier for effective communication with the students.
- **Low connectivity:** Students are facing problem of low internet connectivity being residing in the villages in forest area.
- **Insufficient time:** Both, students and the teachers have no extra time for moving neck right or left due to semester pattern. Packed schedule and continuous burden of examination have insufficient scope for the extra-curricular activities.

7. Notes (Optional):

- It helped in participatory and experimental teaching-learning process. Teaching-learning is one of the major strengths of the institution that has been acknowledged that consequently resulted in preference of the students for getting admitted in the institution.

List of students securing highest marks in final year examination during last five years:

Academic Year	Sr. No.	Name of Students	Year	Group	Distinction	%
2016-17	1.	Ku. Yogita N. Dhawale	S-2017	PCM	PCM	83.88%
	2.	Ku. Kalawati N. Chute	S-2017	PCM	PCM	82.88%
	3.	Ku. Bhumika S. Rawal	S-2017	CBZ	CBZ	72.00%
2017-18	1.	Ku. Shital S. Selokar	S-2018	CBZ	CBZ	76.74%
	2.	Ku. Priyanka R.Jibhakate	S-2018	PCM	PCM	75.81%
	3.	Ku. PranaliP. Dahiwal	S-2018	CBZ	--	69.37%

2018-19	1.	Ku. Kalyani G. Shende	S-2019	PCM	PCM	79.88%
	2.	Ku. Priti H. Salame	S-2019	CBZ	CBZ	68.26%
	3.	Mr. Aman R. Gondane	S-2019	CBZ	CBZ	65.11%
	4.	Ku. Rohinee Y. Khandait	S-2019	PCM	--	61.44%
	5.	Ku. Sneha Anil Bawankar	S-2019	PCM	--	64.88%
	6.	Mr. Kshitij R. Tirpude	S-2019	CBZ	--	63.77%
	7.	Mr. Nikhil H. Zode	S-2019	CBZ	--	63.44%
	8.	Ku. Trupti H. Bhujbal	S-2019	PCM	--	62.77%
	9.	Ku. Veydantie J. Meshram	S-2019	CBZ	--	62.11%
2019-20	1.	Mr. Darshan D. Kathane	S-2020	CBZ	CBZ	75.00%
	2.	Ku. Vaishnavi D. Bhoge	S-2020	CBZ	CBZ	74.74%
	3.	Mr. Ajay L. Mesharm	S-2020	PCM	PCM	73.85%
	4.	Ku. Aishwarya R. Dahiwale	S-2020	CBZ	CBZ	72.37%
	5.	Ku. Mansi S. Thaawakar	S-2020	PCM	PCM	71.40%
	6.	Mr. Vaibhav D. Khobragade	S-2020	PCM	PCM	71.18%
	7.	Ku. Pratiksha M. Patil	S-2020	PCM	PCM	70.88%
	8.	Ku. Monika R. Jibhakate	S-2020	PCM	--	69.33%
	9.	Ku. Yogita M. Shendre	S-2020	PCM	--	68.11%
	12.	Ku. Niru G. Hemane	S-2020	CS	--	66.14%
2020-21	1.	Ku. Punam Namdeo Pise	S-2021	PCM	Che, Phy	78.29%
	2.	Ku. Nikita Bhojraj Wanjari	S-2021	CBZ	CBZ	77.03%
	3.	Mr. Pranay Mahendra Fulzele	S-2021	CBZ	CBZ	75.48%
	4.	Mr. Yash Ramesh Gadborikar	S-2021	CBZ	CBZ	74.00%
	5.	Mr. Saurabh Tomeshwar Panchabhai	S-2021	PCM	PCM	73.62%
	6.	Ku. Tejaswini Dattakumar Gaidhane	S-2021	CS	CS	72.22%
	7.	Ku. Vaishnavi Jivan Jibhakate	S-2021	CBZ	CBZ	72.74%
	8.	Ku. Gayatri Akhil Kore	S-2021	CBZ	CBZ	72.74%

Best Practice-II

1. Title of the practice: Society-oriented activity: Bee with the farmers

2. Objective of the Practice:

- ✓ To provide scientific information to students and farmers through training program on bee keeping practices
- ✓ To utilize rich local agricultural and forest bio-resources.
- ✓ To increase the agricultural production of the farmers by providing pollination services
- ✓ Generation of employment opportunities for the youth.
- ✓ Promotion of organic farming practices
- ✓ To reduce application of synthetic fertilizers and hazardous pesticides.

3. The Context:

- The local region has rich natural resources viz. fertile soil, huge forest area, abundant water resources, varied agricultural crop pattern, however the agricultural production per unit area is very low as compared to national average. Farmers and tribal youth of this region are facing the problems in terms of employment opportunities, low income which leads to migration towards urban area. The adjoining area remain underdeveloped and is recognized as low

industry density area. Rapid industrialization, indiscriminate use of pesticides, monoculture, and deforestation led to decrease in pollination agents' viz. insects in general and bees in specific that resulted in lowering the yield in several crops specifically oil seeds, pulses, horticultural and vegetable fruit crops.

- At the onset of the practice, the faculties from department of Botany and Zoology conducted survey in two Talukas, Pauni and Lakhandur and intervened the farmers. After getting acquainted, the faculties conceived an idea for providing the scientific information to farmers regarding bee keeping and its usefulness in agricultural production and employment generation.
- The faculties started meeting and discussion with farmers and collected the information of several farmers and asked them to join with the movement. It was also observed that abundantly available unused pollen and nectar resources which are the food for bees can be converted to value added products like honey, wax, pollen and propolis.
- The area has potential for beekeeping which again could be tool to eradicate unemployment in local region. The knowledge which could be confined in walls of classroom could be utilized for welfare of society. By considering these facts, effort was taken by faculties to bring the awareness in the masses about potentials of beekeeping. Several NGOs and government organization joined the movement that resulted in recognizing our institution as one of the vital centers for helping farmers in uplifting their agricultural productivity through bee keeping. Being farmer oriented, the practice has been named as "**Bee with the farmers**".

4. The Practice:

The institution creates a synergy between its community work and outreach platforms for providing resource person and the training on bee keeping practices. Since 2014, the institution is engaged in awareness, training and extension of beekeeping in rural area of Bhandara district and other parts of Vidarbha region with the aid of different agencies.

Institutional efforts: The institution as a center of resources and expertise engaged in following activities.

- ✓ **Development of farmer's cluster:** Faculties of the institution are in contact with the farmers of the locality and build up strong network of farmers to bring them under the moment.
- ✓ **Assistance for Beekeeping:** Institution provides technical assistance and resource persons for beekeeping training program organized for the farmers on handling, maintenance of bee colonies and harvesting honey.
- ✓ **Organization of seminars:** Institution organizes various seminars on bee keeping and related aspects
- ✓ **Organization of awareness and training workshops:** Institution organizes training and awareness workshops for farmers and the youth, on regular basis, in collaboration with different agencies. Khadi and Village Development Commission (KVIC) has identified the potential of our institution and joined their hands in organization of training workshops for farmers.
- ✓ **Procurement of financial assistance:** Institution helps the farmers for getting the bee boxes at the subsidized rates and also financial help from various organization.

- ✓ **Providing bee colonies to the farmers:** The institution helps the farmers in providing segregated bee colonies

5. Evidence of Success:

Institution is engaged in awareness, training and extension of beekeeping since last six years with the aid of different agencies in rural area of Bhandara district and other parts of Vidarbha. The success of the employed society-oriented practice is measured in terms of following parameters.

- **Awareness of the farmers and students:** The farmer centric practice employed by institution is recognized in short period that resulted in enhancement in number of farmers joining the mass movement.
- **Enhancement in bee keeping practice:** Institution receives continuous demand from the farmers for providing bee colonies
- **Development of network:** Owing to the efforts taken by the institution, other academic institutions and group of the farmers invites our expert faculty, as a resource person, for on-field demonstration and seminars and workshops.
- **Acclaimed reports on enhancement in agriculture income:** Majority of the farmers started beekeeping in their fields. We received overwhelming response from farmers and youth as they noted enhancement in agricultural production of several crops.
- **Opportunity for employment generation:** Farmers and the youth provided with the training have started extracting and selling the natural honey and other products.
- **Recognition of institution as resource center:** Institutional potential has been identified by KVIC and recommended to submit proposal on Cluster Development under SFURTI program of MSME. Accordingly, the proposal of initial outlay of sum of Rs. 2.5 crore has been submitted, which is now enhanced to 4.6 crore. The proposal is at the final stage of approval.
- **Avenues for research:** The activity undertaken by the institution has opened avenues for working on society-oriented research. Two of the research students have been awarded Ph.D. degree, under the supervision of the recognized faculty, on the topic related with bee keeping.
- **Transfer of knowledge from lab to land:** Outcome of the research and scientific information is explored for the upliftment of the farmers and the youth.

6. Problem Encountered and Resources Required:

- **Backwardness of the area:** The adjoining area is having most of the population of backward communities having small-scale farmers and hence cannot afford the cost of bee hives
- **Traditional thinking:** Educational and social backwardness and sticking to the traditional farming practices is the main barrier
- **Financial inputs:** The institution has restricted financial resources which create obstacle in setting up the required structure
- **Willingness of the government and non-government agencies:** Awareness of the farmers on bee keeping practices towards sustainable agricultural development is the need of an hour and that can be resolved at large scale by the will power of the government and non-government agencies.

6. Important to Note (Optional):

- Two college teachers have guided students for their Ph.D. research work in the field of beekeeping, in the subject of Botany and Zoology.
- The activity initiated by the institution has transformed into mass movement

Training programs on bee-keeping organized by Institution during last five years

Year	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
	2015-16				
2015	13/05/2015	1 Day	One Day Workshop of Beekeeping (Virli Bk.)	Bee keeping	50
2015	22 – 26 Sept., 2015	5 Days	Beekeeping Training Program	Rearing of Bees	24
2015	23 – 27 Nov., 2015	5 Days	Beekeeping Training Program (Raneda)	Training to farmers	46
2016	4 – 10 Feb., 2016	7 Days	Seasonal Bee Management Training Program	Bee keeping training	20
2016	18 – 24 Feb., 2016	7 Days	Honey Quality Control Training Program	Quality parameters	20
2016	25 Feb. – 2 March, 2016	5 Days	Queen Rearing Training Program	Training on queen rearing	20
	2016-17				
2016	03/06/2016	1 Day	One Day Workshop on Mulberry Sericulture	Training on beekeeping	110
2017	26/02/2017	1 Day	Beekeeping Training Program at Ckeck Nimbala Tah. Chandrapur	Training on beekeeping	100
2017	28 Feb. – 4 March, 2017	5 Days	Beekeeping Training Program at Arjuni (Sadak), Gondia	Training on beekeeping	295
2017	5 – 9 March, 2017	5 Days	Beekeeping Training Program at Lakhandur	Training on beekeeping	455
2017	11/03/2017	1 Day	Beekeeping Training Program at Palandur	Training on beekeeping	500
2017	12/03/2017	1 Day	Beekeeping Training Program at Kurkheda	Training on beekeeping	300
	2017-18				
2017	17.12.2017	1 Day	Honey Mission	Advantages of beekeeping	323
2018	19/08/2017	1 Day	Sustainable agriculture through beekeeping	Beekeeping and environmental conservation	328
	2019-20				
2019	23-27 Aug, 2019	5 Days	Beekeeping Training Programme	Training on Beekeeping	25
2019	13/10/2019	1 Day	Distribution of Honey Bee Boxes	Aid to farmers	25
2019	07/12/2019	1 Day	Workshop on Beekeeping at	Training on	60

			Village Kesori	Beekeeping	
2020	28/01/2020	1 Day	Workshop on Mulberry Sericulture	Importance of Sericulture	30
2020	20/02/2020	1 Day	Workshop on National Awareness Programme	Training on Beekeeping	30