BEST PRACTICE: 1

1. Title of the Practice: Glocal Perspectives to Research

2. Objectives of the Practice:

- > To motivate faculty and students to undertake quality research and publish research paper in peer reviewed, UGC care listed journals
- > To motivate faculty to apply for financial assistance from government and non-government agencies
- > To organize webinars, seminars, workshops, conferences on research, IPR, entrepreneurship, etc.
- > To inspire faculty members to file and publish patents
- > To stimulate the students for participating in Avishkar competition

3. The Context:

The Research Committee is one of the strong pillars of Dahiwadi College Dahiwadi. Various activities conducted under research are research projects, research based seminars, workshops. Dahiwadi College Dahiwadi is humbly proud to help the authors of research publications to provide with a platform. The authors who come from different background have scholarly traditions and writing dispositions submit their research work for publications which is peer blind reviewed by the scholars from the same domain or discipline. This ensures the quality of the published material in terms of innovation, relevance, importance and contribution to knowledge of the readers. Besides, there is university recognized research lab for pursuing M Phil and Ph D. Eleven faculty members are working as research guides.

4. The Practice:

Every year seminars/webinars/workshop is held wherein many stalwarts from various domains share their knowledge through interaction with the participants. The participants throughout India participate in the workshop and learn the idea of how to write research paper. The Research Committee organized: e-workshop on "Research Methodology" - 13th Jan 2022; workshop

on "Research, Development and Innovation in Research" - 28 Feb 2022; webinar -12 Jan 22; webinar -17 Jan 22, workshop on "Entrepreneurship and Innovation as Career Opportunity" - 28 Feb 22. Institution's Innovation Council (IIC) also organized various webinars on IPR and entrepreneurship.

5. Evidence of success:

During the assessment period the students and faculty achieved great success in various fields:

- 1. Papers and books published by faculty members: Papers: 173, Books and Chapters: 60
- 2. Ph. D. awarded: 07
- 3. Ph. D. registered: 09
- 4. Awards in Avishkar Competition: 10
- 5. Patents filed and published: 07
- 6. Others:
 - 1. MRPs given through corpus during the last five years: 3,015000/-
 - 2. Incentives for paper presentation and paper publication: 48085/-

For more details:

https://www.dahiwadicollege.in/DisplayResearchPpr.aspx

6. Problems Encountered and Resources Required

The faculty members are not submitting the research proposals in proper way and within time. The major problem encountered by the research team is plagiarism. The research articles with more plagiarism affects the standards of publications. The research articles or papers are rejected mentioning the percent of plagiarism included in the research publication. Many times the publication is not up to the standard of the journal, book. The students are first generation learners; hence they are not aware of

research practice within college.

Supporting Documents:

DCDSSR17-22CR7.2.1 A.pdf (dahiwadicollege.in)

BEST PRACTICE: 2

1. Title of the Practice:

Lab to land: Soil and Water Analysis Laboratory for Farmers

2. Objectives of the Practice:

- ➤ To estimate the physical properties and available nutrients status (micro, macro & secondary nutrients) of soil.
- ➤ To promote Integrated Nutrient Management (INM) through judicious use of chemical fertilizers, including secondary and micro nutrients along with organic manures and bio-fertilizers, for improving soil health and economic returns to farmers.
- ➤ To estimate the physical properties of water and provide its status and recommendations.
- ➤ To provide soil and water testing training for students through skill development course and short term course.

3. The Context:

Most of the people from Maharashtra depend upon farming. But due to scarcity of water and nonproductive soil it is a need of the region to test soil and water for improvement of soil fertility and economic returns to farmers. Soil analysis gives valuable information essential for soil quality improvement. By tracking the exact amount of soil nutrients, a farmer can easily adjust fertigation in accordance with soil and crop requirements. Water analysis provides the status of water and creates awareness regarding potability of it.

4. The Practice

Soil testing lab analyzed soil samples for macro & micro nutrients (N, P, K, S, pH, EC, OC) received from farmers and agriculture department of Satara district, Government of Maharashtra. This data of analysis is uploaded online on Central Government Portal (Soil Health Card Portal) using 3.0 Soil software

which generates report automatically. After this soil health card is generated by system for each sample with status and recommendations in it. These soil health cards are submitted to agriculture department of Man tehsil for distributing to respective farmers.

The lab analyzed 625 soil samples received from agriculture department of Satara district, Government of Maharashtra and 1435 soil samples under National Food Security Mission (A programme of Central Gov. India). Similarly, the lab analyzed 140 soil samples directly received from farmers and students during the last five years.

Department of Chemistry organizes water testing camps every year in adopted villages Bhandavali, Wavarhire and Waghmodewadi. Samples are analyzed on site and reports are handed over to Sarpanch of the village.

As a part of extension work the department of Chemistry organized 8 awareness programmes for farmers/extension personnel during the last five years. They are as follows:

5. Evidence of Success

- Farmers of Man tehsil achieved knowledge about soil condition and how to improve it.
- Getting proper knowledge of soil and water, expenditure on fertilizers is minimized by avoiding unnecessary fertilizers.
- Farmers are able to cultivate appropriate crop as per the soil condition.
- Farmers have got benefits of different government schemes by using soil analysis reports provided by the college lab.
- Water analysis reports created awareness regarding quality of water among the people and as per the recommendations given by the lab people started using water filters.

• The lab generated Rs. 222475/- revenue analyzing 2150 samples.

For more details:

- 1. https://youtu.be/P3znSxAims8
- 2. https://www.youtube.com/watch?v=pNYCklk0DNo
- 3. https://www.youtube.com/watch?v=K-JY9On9omc
- 4. https://www.youtube.com/watch?v=UM_mN5N_okA
- 5. https://www.youtube.com/watch?v=S-B0JsFmqhk
- 6. https://www.youtube.com/watch?v=K6USbVAve7U

6. Problems Encountered and Resources Required

- 1) Lack of immediate availability of acetylene gas
- 2) Due to less rainfall in the region farmers are not aware of soil and water analysis.

Resources required: Analytical instruments and human resources

Supporting documents:

DCDSSR17-22CR7.2.1 B.pdf (dahiwadicollege.in)