BEST PRACTICES-I



Title of the Practice

Rural to Global: Inculcating excellence in rural and marginalized students through emerging technologies

Objectives of the Practice:

To provide ample opportunities to economically backward rural students by

- training them in current and futuristic technologies
- facilitating high-tech infrastructure and financial support for research and innovative projects to strengthen their research capacity in emerging areas
- holistic personality development through soft skills, writing skills, project designing & extra
 co-curricular activities, sports and sensitizing them to social issues, and ethics to become
 global citizens.
- inculcating entrepreneurship and innovation potentials through an ecosystem for 'Start-ups' in India and abroad through active MoUs.

offering need &value-based academic programmes of studies that are interdisciplinary in their approach and providing effective mentorship

The Context: Background of the issue

The University presently caters to the needs of higher education to approximately five lakh students (out of which more than 75% are from the rural background **first generation higher education pursuant**), in over 680 affiliated colleges spread over six districts. The University has embraced new technologies in teaching and research to reach the student and teacher fraternity of these colleges and has been giving wings to the dreams of the rural youth by catering to their educational needs. It ensures connectivity among teachers and students and improve student engagement. Realizing the potential benefits of new technologies to the rural students, the institute has proactively implemented IT/ICT infrastructure, skill building of teachers, and development of nationally recognized e-resources to enhance the digital learning experience of rural and marginalized students. These students have also been imparted research and application skills in bioinformatics tools, Artificial Intelligence and Data Sciences through various international collaborations.

The Practice: (Measures for rural underprivileged students)

The University has created an effective ecosystem with specific practices as under -

- The students of rural backgrounds especially girls whose parents are hesitant to send their daughters out of the villages are first given orientation. Their communication skills are enhanced through language labs and value-added courses.
- To provide exposure to rural students, IT/ICT infrastructure has been significantly strengthened during the last five years with a dedicated budget of Rs. 325 lakhs per year. The university has created 38 classes with smart boards, 963 computers exclusively for students, 85 LCD projectors, 46 Computers Labs, and 85 laboratories, Central Instrumentation Facility (CIF), Museum, Media Laboratory, and Art Gallery.
- The library has a rich collection of e-resources like e-Books, e-Journals, etc. and access to about 6000 e-journals. Specialized computer software with licensed or free versions like MATLAB, MATHEMATICA Anti-Plagiarism software (TURNITIN, CheckForPlag (CFP)) available for student usage.
- Awareness programmes, Hackathons, seminars, and workshops are conducted to develop
 the holistic personality of students through soft skills, writing skills, project designing, and
 co-curricular activities.
- Students hailing from villages who are physically strong are attracted towards sports activities. The University has state-of-the-art facilities such as a wrestling stadium, high-tech gym and well-maintained playgrounds, sports officers, and qualified coaches.
- A student born and brought up in remote areas is not exposed to the competitive world. Hands-on training sessions and workshops are conducted on applications of emerging technologies. In addition to a structured curriculum, sessions of career counseling & guidance, and remedial coaching are frequently organized to prepare them for corporate jobs and competitive exams like UPHEC, NET/JRF, GATE, JEST, etc.
- 50 Scholarships are given yearly to meritorious research students (non-NET/ NET).
- Students from rural areas are able to bring insight into addressing crucial needs in rural areas for example agriculture, health issues, etc. Financial assistance with grants ranging from Rs.10,000 to Rs. 50,000 is also provided to students with good research/innovative ideas.
- The Center for International Cooperation (CIC) conducts collaborative training programmes, joint research, and student and faculty exchange programmes through 52 functional MoUs with various national/international organizations of repute.
- 1577 e-contents were uploaded by the university during the pandemic.
- SWASTH- Student Wellness Aid Scheme & Training in Health, and Equal Opportunity Cell support for students.

Evidence of success:

- The University has attained an excellent citation index of more than 11 citations per paper and an *h*-index of 41.5 by SCOPUS & WOS.
- Times higher education ranking included Chaudhary Charan Singh University, Meerut in the top 100 universities of India.
- India Today ranking listed our university at 24th position in India, in 2022.

- A good number of rural students have been placed across the globe in various academic and scientific institutions as post-doc fellows, scientists, technologists, and faculty members e.g., NPL, AIIMS, UP Higher Education Commission, HEIs of Delhi University, Saitama University, Japan, Istituto Italiano Di Tecnologia, Italy, University of Milano-Bicocca, Italy Center Murdoch University Australia, Sheridan College Mississauga, Ontario, Canada, etc.
- 10 International Fellowships awarded out of which 6 are from rural areas.
- 131 PhDs were awarded in the last five years out of which more than half are either first generation higher education pursuant or underprivileged.
- 39 patents have been published so far in which 70% inventors are from rural background.
- **68** research funding assistance projects were received in 19 eligible departments out of which most of the research fellows belong to rural background.
- Our university provided opportunities to several students from villages to fly away to institutions abroad through international MoUs signed in the last five years.
- University researchers including students from rural areas, published **1080** research papers.
- 477 students qualified for National/ State government competitive examinations out of which around 70% were rural students.
- Majority of **251** Medal/Awards won by the students in the academic field goes to female rural students.
- 70 percent of the total **310** JRF/SRF Fellowships &**101** GATE Qualified belong to rural villages.
- Two girl students from remote villages were awarded prestigious Japanese Govt. MEXT fellowship to study in Japan.
- Two boy students were selected for reputed Milano-Bicocca fellowship, for their research studies in Italy.
- Heroes of 'Rural to Global' in Sports:
 - o Khelo India ranked our university as First in UP and 15th in India.
 - o **121** medals (33-Gold, 28-Silver, 50-Bronze) received in AIIU and KIUG Sports in the last five years.
 - o Arjun Award in Wrestling and Gold Medal in Commonwealth awarded to Alka Tomar, a rural girl.
 - o Annu Rani, a girl from poor family in village; first Indian woman Javelin Thrower was awarded a Bronze Medal in Asian Games as well as in Commonwealth game.
 - o Rupal Chaudhary called 'Meerut Express', a UP farmer daughter, first Indian to win two medals at the World Under-20 Athletics Championship held at Colombia.
 - Divya Kakran, Muzaffarnagar girl from a rural and with meager resources bagged Bharat Kesari 08 times & a gold medal in Commonwealth Championship held at South Africa.

Problems Encountered and Resources:

- Adoption of new technologies is always a challenging task especially for rural students.
- Limited funding from external sources hampers research promotions.
- Building links with partners from different sectors requires more managerial staff.
- More hostels are required to accommodate female students from villages.
- Students from rural backgrounds require more attention and mentoring.

Best Practice –II



1. Title of the Practice:

Sensitizing and Engaging young minds through 'touching lives' for the holistic development of the people in villages

2. Objectives of the Practice:

The University aims at standing not only as an institution of higher learning, but an organization with the social responsibility by instilling ethical and humanitarian values in the students. The University also makes efforts to increase Emotional quotient (EQ) of the students along with their Intelligence Quotient (IQ). The university has adopted villages such as (Kaul, Badhauli, Basaud, Anara, Mussoorie) of its jurisdiction so as to ensure social participation in the society.

The major objectives of the practice are as follows:

- To inculcate tolerance and harmony amongst rural community in cultural, regional, linguistic, communal levels for unity in diversity, growth, progress, positive change including economic, environmental, social and demographic components.
- To educate and enhance public awareness about basic problems of the villages through surveys and resolving the issues with local relevant solutions.
- To increase access to quality education to all students irrespective of their caste and creed by providing them support from university, through local experts, government, and non-government organisations.
- To conduct training programs including pedagogies and learning, field excursions, seminars and organizing outreach activities thereby inculcating the feeling of belongingness to the nation as well as social accountability.

3. The Context

The University, being situated in the heart of the rural society firmly believes in catering to the needs and aspiration of the people belonging to the rural background. The strategic plan of the university for villages targets: -

- at holistic development of diverse communities, especially the vulnerable and the marginalized ones, who are deprived of their services and rights.
- to establish sustainable partnerships with different sections of the society and build inter-institutional linkages with self-help groups and government officials for effectively addressing social concerns under 'Unnat Bharat Abhiyan'.

- to fulfil societal demands and find solutions to day-to-day issues and strengthen outreach and extension activities by organizing awareness programs related to sanitation, hygiene, water & energy conservation, and soil fertility management.
- initiating gender sensitization efforts for empowering women.
- providing educational support to school children and underprivileged children.
- to inculcate a strong feeling of civic duty among students and assist them in extending their classroom learning and applying their knowledge to real-world issues.
- to work in the adopted villages some of which are stated as below
 - Kaul- This is a village located in Kharkhoda block of Meerut district. Its population is 2937. The literacy rate of females in this village is only 23.5%.
 - o **Basaud** This village is located in Pilan block of Baghpat district. It is an important village as it took part in the first War of Independence and people of this village were executed by the British army for revolting against them. The university has adopted this village which has the population of 7780.
 - **Badhali** This village is located in Kharkhoda block of Meerut district. It has the population of 2411.
 - **Ahara** This village is located in Meerut Tehsil of Meerut district. It has the population of 1206.
 - o **Masoori** This village is located in Rajpura block of Meerut district. The total population of this village is 5736. The female literacy rate is only 27.3%.

4. The Practice

- To equip Anganwadis (rural mother & child care centers), for the under-privileged children, **503** kits containing stationery, utensils, toys, storybooks, tricycles, first-aid box, etc. (worth more than **Rs 1.3 Crores**) were distributed in the villages at the behest of the Honourable Chancellor & Governor.
- With the aim of following the concept of 'KG to Ph.D.', the university runs a primary school (Madan Mohan Vidya Mandir) to uplift the impoverished children with a financial support of Rs. 65.74 lakhs during the last five years, besides the extension of building.
- An informal evening school (Street Gurukul) is running in the campus for marginalized and poor street children supported by campus teachers and other staff members providing books, clothing and stationery, etc., as well as voluntary teaching &mentoring, admitting some of them to the school without payment of fees.
- A socio economic survey of the adopted village was conducted by the students of University. In this survey, information was collected about various social, economic problems of these villages.
- Basaud is a revolutionary village with a history of its own so the university has made a special efforts for free education in the university for the youth of the village. A library has also been built for better and easy access to books and knowledge for the villagers, and helping aspirants of competitive examinations.
- Under the policy of "Digital India", the university has conducted training camps in adopted villages for educating people about basics of computers and internet.

- Every year 'Van Mahotsav' (July 1-7) is held for improving health of the environment by planting more than 1500 tree saplings. **One lakh** Peepal trees were planted in Meerut district by university community.
- The lush green natural environment of the campus attracts more than 400 people daily for their morning and evening walks.
- One-week long Vigyan Festival in February 2022 was made open to public with small documentaries highlighting rich scientific and technological culture of India to propagate the idea of self-sufficiency, ĀtmnirbharBhārat amongst youth.

• Unnat Bharat Abhiyan initiatives

- o 10 villages were adopted.
- o More than 200 TB patients adopted, provided nutritious diet, cured all; and now 39 new active cases are being looked after.
- o Health and Hygiene, sanitation, vaccination campaigns in villages, blood donation camps, free online/offline psychological counseling.
- o Programmes for "Swachh Bharat" were also conducted in the villages
- o 'Padhe Meerut Badhe Meerut Abhiyan'

• Initiatives during Covid 19 pandemic in villages

- Generous contributions to PM and CM care funds, for students who lost their guardians due to pandemic
- Food packets were distributed to labourers
- o Guest houses and hostels were converted into isolation wards.
- Free distribution of sanitizers and masks

• 'Mission Shakti Abhiyan' reaching rural areas

- Medical checkups, Covid testing and Psychological Counseling sessions camps, awareness on women fundamental rights, various Government policies and programs, the importance of vaccination, cleanliness, nutritious diets, mental health, yoga, cervical cancer, menstrual problems etc., were organized.
- Various schemes and financial grants for startups were explained through student volunteers

5. Evidence of Success

- The social outreach endeavors have led to the following successful outcomes:
- 503 Anganwadis were benefitted.
- Gurukul street and Madan Mohan Malviya school children showed improvement in studies and holistic development, enrolment from 96 in 2017 to 300 in 2022.
- Tree plantations contributed to improving air quality and supporting wildlife. Hundreds of residents from the local area showed improvement in health through morning walk.
- 100% TB patients cured.
- Public campaigns encouraged women to apply for various Indian Government schemes like 'Beti Bachao Beti Padhao', 'RashtriyaMahilaKosh', 'UJJWALA Yojana', STEP, etc.
- Donations to pandemic relief funds, distribution of sanitizers and masks helped in preventing the spread of diseases.
- Sharing institutional buildings provided space to patients during pandemic.

• Scientific awareness in the society and a sense of patriotism was inculcated among the youth through week long Vigyan Festival.

6. Problems Encountered and Resources Required

- A need to have adequate community-based infrastructure to strengthen community engagement.
- Capacity-building programs for students and faculty, as well as active alumni networks, are needed to broaden the scope of attaining university's mission.
- To promote and sustain University initiatives of social outreach, positions for recruiting trained professionals such as social workers, counselors, fund mobilizers, IT experts and others, are needed.
- Lack of education in various sections of the society in rural areas of Meerut is another issue
- Sufficient staff for the smooth and intensive organization of such activities is required.
- Social stigmas and taboos hinder the educational promotion process.