







Report on the workshop titled

Identifying the synergy between the Unnat Bharat Abhiyan (UBA) and the (New) National Education Policy (NEP)

Conducted on

Monday, January 23, 2023

Organized by

Centre for Rural Alternatives for Rural Areas
(CTARA), IIT Bombay
Subject Expert Group - Ethos in Technical Institution

Subject Expert Group (SEG), CTARA-IIT Bombay is trying to explore ways to strengthen the UBA framework and enable the UBA institutions to achieve their goals. In this regard, there is a need to understand the National Education Policy (NEP) and its role in enhancing the societal engagement of the faculty and students. Thus, we conducted a 1-day workshop on 'Identifying the synergy between UBA and NEP' on January 23 at VMCC Board Room (4th Floor) of IIT Bombay campus.

Objectives of the workshop:

- 1. To understand the National Education Policy (NEP) 2020 in the context of higher education (especially technical education) and its implementation process.
- 2. To identify any scope/provisions/suggestions in the NEP 2020 regarding societal engagement of the students and teachers of higher education institutions (HEIs).
- 3. To explore the possibilities of synergy between the Unnat Bharat Abhiyan (UBA) and the implementation of NEP

The workshop aimed to address the following three questions:

- 1. How would the NEP encourage societal engagement of higher education institutions (HEIs) and facilitate the UBA program?
- 2. What kind of changes in the curricula and the incentive structures that would help UBA, could be enabled by the NEP?
- 3. What types of training and capacity-building efforts need to be planned for the higher education institutions (HEIs) so that they can meaningfully participate in the UBA?

The meeting began with an introduction of CTARA and the UBA Subject Expert Group, followed by introductions of all panel members. Along with the questions that the workshop aimed to address, the participants were also looking forward to discussing the following points as well:

- What role can Massive Open Online Courses (MOOCs) play in NEP and rural development?
- Possibilities for integrated programmes in which medical and engineering students can collaborate
- Increasing HEIs' societal engagement and capacity building
- What technologies can assist in serving students from rural or humble backgrounds?
- Fostering local entrepreneurship and addressing local problems.
- What UBA can do to help colleges and other institutions improve the extension activities that are being carried out for students from various socioeconomic backgrounds?

Dr. Ajay Saini from UBA-NCI, IIT Delhi gave a brief idea about UBA wherein he also emphasized that UBA is trying to bridge the gap between educational institutions and society so this workshop will help us in that direction.

Panel Discussion - round 1

Topic 1: How would the NEP encourage societal engagement of higher education institutions (HEIs) and facilitate the UBA program?

Chairpersons: Prof. Bhagawantrao N Jagatap and Mr. Vivek Sawant

Moderator: Prof. Bakul Rao

Points covered by

- 1. Prof. Bhagawantrao N Jagatap:
- NEP embodies the essence of UBA
- As per NEP 2020, there will be no rigid separations between curricular and extra-curricular activities.
- In sustainable development, India was placed at the 120th position. We must boost our efforts to use UBA to accomplish the SDGs.
- Need to increase research programs that focus on local problems. For example, farmer suicide in Maharashtra, food preservation problems in India, etc.
- We need to work on socio-economically empowering people in rural areas.
- Students need good mentoring faculties. We should think about economically empowering students.
- Traditional skills can be improved via technological interventions. It is not difficult to sensitize students about it. We just need to present different scenarios to students and ask appropriate question/s.

2. Mr Vivek Sawant:

- People implementing NEP might be unaware of UBA and vice versa.
- We need to define rubrics to understand the village from an SDG perspective.
- It is crucial to specify what we mean by "Unnat." Unnat should have a precise, falsifiable, and measurable definition. This can help us analyze and better understand where to start and measure the progress.
- We need to work on engaging villages in actionable knowledge.
- Students might not be completely aware of SDGs. NPTEL or other platforms can create a course to explain SDGs and national development agenda to students.
- We can refer to Books like 'लोकनीती' to better understand and sensitize students about community empowerment and national development.
- By 2045, green-collar jobs may account for 25% of all jobs in developed countries. We should focus on preparing students for green-collar jobs. For research and studies, topics such as 'How to Decarbonize Cities?' can be chosen.
- UBA needs to brand itself carefully. It should not be like the concept of enjoyable education. There are 45-minute periods in the name of enjoyable education.

- The transformation we anticipate must take place in a structured/business-like manner. Focus on constructing a proper structure.

Following were the additional points from the experts on topic 1:

1. Dr Revati Namjoshi:

- While developing the programme, we need to consider a sustainable livelihood approach.
- Course credits must be defined clearly. There can be more clarity in the distribution of credits.

2. Major Dr Ashlesha Tawde:

- The 17th SDG goal includes gender equality, education, environment, social justice, etc. These points are addressed in NEP as well. We can think of bringing these points together via different mechanisms and processes without losing our direction.
- Look for ways to achieve internalization of UBA while implementing NEP.

3. Dr. Prasad Waingankar:

- We can include a course on teaching social responsibilities. 1 credit can be for completing an online course (maybe on SWAYAM platform) and 1 credit can be for field activities. The UGC has already written to university vice chancellors requesting that such a course shall be initiated.

4. Dr. Rajan Welukar:

- Whatever we are planning to construct should be SIM (S: Simple, I: implementable, M: measurable)
- Students cannot revolutionize entire villages. It is unrealistic to expect students who are still in their formative years and trying to figure out how to manage their own lives to transform the village. We should prioritize creating intervention strategies first. Teachers must first be educated and trained because they are not fully aware about the SDGs and the circular society. Small projects can then be assigned to the students.
- We can follow the AEIOU strategy in a stepwise manner.
 - > 'A' stands for Awareness. We first need to create awareness.
 - 'E' stands for Exposure & Experience.
 - → 'I' stands for Involvement. Involving students in small projects (through curriculum)
 - > 'O' stands for Opportunities. Students need to be given opportunities.
 - 'U' stands for Understanding.

During this process, students will gain understanding, which can lead to the development of compassionate citizens and leaders.

Panel Discussion - round 2

Topic 2: What kind of changes in the curricula and the incentive structures that would help UBA, could be enabled by the NEP?

Chairpersons: Dr. Rajan Welukar and Prof. Sanjay Chitnis

Moderator: Prof. Anand B. Rao

Points covered by

1. Prof. Sanjay Chitnis:

- External incentives may not be effective for students. Internal motivation is essential for working in rural areas. It is more important to engage students in solving social problems. We shall concentrate on creating interest in the experience gained while working in this area.
- Figure out what kind of development students want to see.
- It is sometimes necessary to make students realize that it is their responsibility to give back to society (irrespective of whether they like it or not).
- Students who participate in efforts to make a positive impact in rural areas may receive additional points or marks.
- IT companies' strategies and structures can be adopted.

2. Dr. Rajan Welukar:

- A sustainable development approach needs to be integrated with all the coursework.
- Just having one or two sustainable development courses is not going to help.
- Create reusable learning objects.
- Empower students to take charge of their own learning
- Consider credit vs. competency-based courses carefully.

Following were the additional points given by

- 1. Dr Nirmaljeet Singh Kalsi (He joined the workshop in a virtual mode):
- To realize the intent and objectives of National Education Policy 2020, the National Credit Framework (NCrF), has been jointly developed.
- In one year, students will have 1200 contact hours for 40 credits.
- NCrF provides for creditisation of all learning
- Ratio of online to offline study needs to be defined
- NCrF enables multiple entry multiple exit

2. Mr Vivek Sawant:

- Incentive structure can be built through awards and prizes as well. Establish the Unnat Bharat Abhiyan Olympiads.
- Incentive structure can be built through awards and prizes as well
- Students can be given local problems to solve. They can take inspiration from existing innovative solutions. Medals can be awarded to whoever comes up with good solution/s or better implementation methods. Finding effective methods for sugarcane cutting, solving drinking water problems

for particular areas, and other issues may be presented to students as problems.

3. Dr Prasad Waingankar:

- Students should be given opportunities to adopt 2 families or stay with 2 families and help them so that they can understand their problems better.

4. Prof. G. D. Yadav:

- Trimester pattern works better than the semester pattern.
- During each trimester, half of the students can go on fieldwork and half can stay in class, and this rotation will continue. This not only allows students to gain work experience but also can make them financially independent. Students also learn skills like collaboration and communication.

5. Prof.Bhagawantra N Jagatap:

- Usually local context is not provided to students via curriculum. We might have to focus on communicating local problems. For example, students are aware of glacial melt in Antarctica but not about the melting of Himalayan glaciers.
- Technologies that are already available must be utilized to solve problems. Students can be trained and motivated, or they can be given opportunities to learn about these technologies and figure out how to implement them.

6. Mr Vilas Tawde:

- Students' physical quotient is decreasing. A compulsory credit course for physical quotient should be offered in the first year of graduation.
- People of calibre who are aware of their village and its problems wish to relocate to cities. Thus, we need to think about what can be done to make such people stay back.
- The carbon market is going to be a big industry in the future. One can focus on determining how the carbon market can aid rural development.

Panel Discussion - round 3

Topic 3: What type of training and capacity-building efforts need to be planned for the higher education institutions (HEIs) so that they can meaningfully participate in the UBA?

Chairpersons: Prof. Ganapati D. Yadav and Prof. Surendra

Moderator: Prof. Anand Rao

Points covered by

1. Prof. G. D. Yadav:

- The majority of teachers (faculty) in HEIs must be equipped with modern tools. Teachers should be knowledgeable about areas such as AI, machine learning, and so on in order to properly guide students in the exploration phase.

- Faculty from IITs and NITs should be encouraged to take a sabbatical and work with lesser-known or smaller institutes that may require their help and support.
- Apart from environmental science, law-related education should be given to students which can help them understand.
- 2-3 colleges can collaborate for fieldwork. Villagers can be given opportunities to evaluate their efforts.

2. Dr. Surendra Thakurdesai:

- To understand and solve problems we need to have sufficient data. If this data is made available to all the HEIs and research institutes, it will be possible to understand and analyze data from different perspectives, which may aid in the development of effective problem-solving methods.
- Faculty from different disciplines need to be trained to take an approach that encourages students to identify problems and collaborate to solve them.

3. Dr. Geetanjali Date and Dr. Sybil Thomas:

- HEIs can participate in activities such as keeping biodiversity registers for local areas.
- Students' aspirations should be taken into account when developing future programmes.
- Local colleges usually have a better understanding of local issues, but they may lack research expertise. HEI faculty have expertise but might lack connection with the local people and issues. So, there is an opportunity for HEIs to collaborate with local schools and colleges.
- Faculty at HEIs must also receive pedagogical training.
- Need to carefully define the vision that will be sold to students through UBA.
- Learning outcomes shall be demonstrated through the impact.
- Professors of two different departments should collaborate and teach the interdisciplinary course, rather than the two parts taught independently by 2 different people in an isolated room.
- We need to figure out how to go about identifying areas where a community or group of people want to come together and work with HEIs.

4. Prof. Chaaruchandra Korde:

- Meaningful engagement of students in community empowerment
- Need to develop rural entrepreneurship

5. Dr. Jayakrishnan M.:

- Capacity building can be done by utilizing structures and models created by Massive Open Online Course (MOOC) platforms such as National Program on Technology Enhanced Learning (NPTEL).
- NPTEL has developed a model for reaching out to students and teachers in an organized manner. The intensive structure is also in place. Local chapters of NPTEL have been established. Colleges are rated A, AA, and so on based on various factors such as the number of students enrolled and their performance.
- Such online courses coupled with offline field work can be used for effective capacity building.

6. Dr. Prasad Waingankar:

- During capacity-building efforts, we should also show to students how programmes like UBA have made an impact.
- It is necessary to teach students how to reach out to people and identify problems.

7. Mr. Vivek Sawant:

- To create meaningful dialogue between HEIs and rural people we should reach out to rural experts.
 - Every village will have a few wise people who understand the people and their problems. These individuals can be involved in capacity-building sessions.
- 'How to access government schemes' is one of the problems faced by rural people. Through UBA a system can be set up which can help these people.
- People should be made aware of their rights such as community forest rights.
- HEIs can guide rural people to solve their legal problems. Collaborating with students from different areas of expertise and organizations like Farmer Producer Organisations (FPOs) and 'Water User Association (Pani vapar sanstha)' can be beneficial.
- HEIs can think about how assistance can be provided to rural entrepreneurs for completing paperwork

8. Dr. Ajay Saini:

- Reimagine development from the eyes of rural people.
- Languages in India are dying at an alarming rate. When a language is lost, traditional ecological knowledge is often lost. One of our country's assets is its pluralism.

9. Prof. Bhagawantrao N Jagatap:

- Need detailed surveys for identifying problems. Surveys should be done taking the sensitive points into account.

10. Dr. Surendra Thakurdesai, Dr. Rajan Welukar and Dr. Sanjay Chitnis

- The first step in capacity building is to create content for teacher training.
- Teachers should be given some incentive for taking part in the programme. From every college at least 2 teachers should participate.
- Online training will not be sufficient. The hybrid mode could be more effective.
- Counselling rural students is essential. HEIs can be involved in counselling.
- Information Transfer Transformation (First, we must create content, which can then be transferred, and this transfer can aid in transformation)
- The immediate course of action could be to select a cluster and conduct a pilot study in the upcoming academic or financial year.
- Different stakeholders from each institute may be involved.

The following action items emerged from the workshop:

- 1. Consult with experts in the field of sustainable development and create a rubric that can be used by HEIs to understand villages from an SDGs perspective.
- 2. Contact people from social enterprises such as Haqdarshak who are working to make welfare schemes more accessible, and investigate what role HEIs can play in raising awareness of government schemes among villagers and assisting them in the application process.
- 3. Arrange a meeting for HEIs faculty members from various disciplines to foster collaboration in identifying local problems and solutions.
- 4. Organize sessions or workshops to inspire students to participate in the UBA project. These sessions may also address the vision and mission of Unnat Bharat Abhiyan (UBA) and how they can involve themselves in conducting community-based activities.
- 5. Find appropriate resource persons and organize online sessions for HEIs on what are People's Biodiversity Registers (PBRs) and how to maintain one for their local areas.

Annexure 1: Group photo taken during workshop

Annexure 2: Program schedule

Annexure 3: List of experts who were involved in the workshop

Annexure 1: Group photo taken after the workshop on identifying the synergy between the Unnat Bharat Abhiyan (UBA) and the (New) National Education Policy (NEP)



Annexure 2: Program Schedule









One-Day Workshop

On

"Identifying the synergy between the Unnat Bharat Abhiyan (UBA) and the National Education Policy (NEP)"

Monday, 23rd January 2023, 10:00 – 16:00

Venue: VMCC Board Room (4th Floor), IIT Bombay

Program Schedule

| S. No | Session | Time | |
|-------|---|---------------|--|
| 1 | Welcome and Introduction | 10:00 - 10:20 | |
| 2 | Round of Introduction | 10:20 - 11:00 | |
| 3 | Introduction to Unnat Bharat Abhiyan (UBA) | 11:00 – 11:10 | |
| 4 | Panel discussion on topic 1: How would the National Education Policy (NEP) encourage societal engagement of the higher education 11:10 – 12:00 institutions (HEIs) and facilitate the UBA program | | |
| 5 | Panel discussion on topic 2: What kind of changes in the curricula and the incentive structures that would help UBA, could be enabled by the NEP | 12:00 – 13:00 | |
| Lunch | | | |
| 6 | Panel discussion on topic 3: What type of training and capacity-building efforts need to be planned for the higher education 14:00 - 15:00 institutions (HEIs) so that they can meaningfully participate in the UBA | | |
| 7 | Open Discussion/ Way Forward 15:00 – 16:00 | | |

Annexure 3: List of Experts

| S.N | Name | Affiliation and Institute Name |
|-----|-----------------------------|---|
| 1 | Prof. Ganapati D. Yadav | National Science Chair (SERB/DST/GOI) and Emeritus Professor of Eminence Institute of Chemical Technology, Mumbai |
| 2 | Mr. Vivek Sawant | Chief Mentor, Maharashtra Knowledge Corporation Ltd. |
| 3 | Dr. Revati Namjoshi | Senior General Manager, Maharashtra Knowledge Corporation Ltd. |
| 4 | Dr. Bhagawantrao N Jagatap | Retired Professor, Department of Physics, IIT Bombay |
| 5 | Prof. Sanjay R. Chitnis | Professor & Dean, School of Computer Science & Engineering, RV University, Bangalore |
| 6 | Dr. Nirmaljeet Singh Kalsi | IAS, Chairperson, National Council for Vocational Education & Training, New Delhi |
| 7 | Prof. Sushma Yadava | Commission Member, University Grants Commission |
| 8 | Prof. Sybil Thomas | General Manager, Training and Academic, Maharashtra State Faculty Development Academy, Pune |
| 9 | Dr. Geetanjali Date | Centre Coordinator, Centre for Evaluation and Assessment, Maharashtra State Faculty Development Academy, Pune |
| 10 | Prof. Rajan Welukar | Vice Chancellor, Atlas Skill Tech University |
| 11 | Dr. Surendra C. Thakurdesai | Professor and Head, Department of Rural Development, Gogate - Jogalekar College |
| 12 | Dr. Prasad Waingankar | Professor & Head, Community Medicine, MGM Medical College, Mumbai |
| 13 | Major Dr. Ashlesha Tawde | Community Medicine & Public Health Specialist, MGM Medical College, Mumbai |
| 14 | Dr. Jayakrishnan M | Senior Research Scientist, National Programme on Technology Enhanced Learning (NPTEL), IIT Madras |
| 15 | Prof. Milind A. Sohoni | Professor, IIT Bombay |
| 16 | Prof. Bakul Rao | Professor, IIT Bombay |
| 17 | Prof. Chaaruchandra Korde | Assistant Professor, IIT Bombay |
| 18 | Dr. Ajay Saini | Assistant Professor, IIT Bombay |