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June 30, 2021

To,

Hon Shri Uday Samant, Minister, Higher & Technical Education, 501, Main Building, 5th Floor, Madam Cama Road, Hutama Rajguru Square, Mumbai-32

Hon Shri Prajakt Tanpure, Minister of State, Higher & Technical Education Department, 214-D, Vidhan Bhavan Vidhan Bhavan Marg, Backbay Reclamation, Mumbai-32

Hon'ble Shri Uday Samant and Shri Prajakt Tanpure,

Government of Maharashtra had set up a Task Force to study the National Education Policy - NEP 2020 and make suitable recommendations for its implementation in the State of Maharashtra.

The First meeting of the Task Force was held on 3rd November,2020 at Sahyadri State Guest House Mumbai in physical as well as online mode. During the meeting, both of you had elaborated on the State Government's expectations.

Subsequently, the Task Force conducted several online meetings and deliberations, not only within themselves, but also with some of our most leading domain experts and thought leaders in the field of academia, corporate world and society.

We are happy to present the Final Report of the Task Force to the Government, for its consideration and implementation. We would like to specifically mention a few points relating to the Report.

First, the Task Force has focused on broader issues of NEP 2020 and its implementation, rather than going into details of implementation of each recommendation enlisted in the NEP 2020 document.

Second, all policies and actions have been suggested based on available current information, evidence and data and not merely on opinions. The Task Force felt that in some areas the data availability was not adequate in terms of quantity and/or quality. Thus suggestions have been made about creation of some key White Papers, detailed preparatory plans and comprehensive roadmaps through appropriate teams or cells. These will need to be prioritized as immediate and urgent starting points for the State to work on.

Third, it is not the ideas but implementation that is the key. Therefore, to make the task of implementation easy for the Government, the recommendations have been classified as per their Urgency, Impact, Ease of Implementation, Investment and Funding implications as well as Priority for Execution. The Task Force strongly urges the Government to set up a dedicated Monitoring Committee for assured, speedy and effective implementation.

The Task Force members would like to thank you, the Hon'ble Ministers and the Government of Maharashtra for this thoughtful and forward looking initiative.

We feel confident that with our current enlightened leadership, which is so committed to education, it will be possible to rethink, reimagine and reinvent our present education system, and transform it to be amongst the best, not just nationally, but globally.

The Task Force members would like to thank you and the Government of Maharashtra for this initiative towards the reforms, which will transform the present education system.

With warm regards,

Barahn	
1.	

Dr Sukhdeo Thorat	Of Suhas Pednekar	Dr Shashikala Wanjari
Dr Pramod Yeole	Dr Rajan Welukar	Mamal Dr Vilas Sapkal
Or G.D. Yadav	Dr B.B.Ahuja	Shri Nitin Pujar
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Shri Milind Satam	Dr Abhay Pethe	Shri Vijay Kadam
Dr Dhanraj Mane 18 6	Dr Anil Patil	Dr Abhay Wagh

Preface

The New Education Policy (NEP 2020), presents to us a once in a lifetime opportunity to Rethink, Reimagine and Reinvent Higher Education in Maharashtra. Therefore, the setting up of this task force to create a roadmap for implementation of NEP 2020 in Maharashtra is absolutely timely.

I feel so privileged to have been asked to chair this Task Force.

What are the five biggest challenges that we have in our state?

The first and foremost issue for us in Maharashtra is moving from 'right to education' to 'right education', to 'education for all'. It translates itself into an all-round inclusion of 'have nots', where this section of the excluded society gets an access to high quality education, that is "affordable and accessible". The corona virus pandemic has pushed millions from poverty to extreme poverty. Therefore, the quest for 'inclusion' is not an option, it is a must. Further, the issue of 'growth' translates into 'job or livelihood led inclusive growth'. And therefore, the education and skills that our systems impart must lead to tens of millions of jobs, work or livelihood opportunities straddling the entire economic pyramid.

Our report proposes solutions to this most crucial challenge.

The second is the single minded pursuit of excellence, both in teaching and research. And also realisation that teaching without research is sterile. But it goes beyond it. Education disseminates known knowledge. Research creates new knowledge. Innovation converts knowledge into wealth and social good. There is a seamless connection between education, research and innovation in world class universities. Our report makes an earnest effort to achieve this seamlessness.

The third is world-class governance. Good governance provides an unshakable and robust foundation leading to a long-term stability and

sustainability. Unflinching commitment to achieving true institutional autonomy is a must since autonomy is the lifeline of universities. We must design, develop and deliver new solutions that will not only lead to the adoption of 'best practices' in governance but also hopefully create the 'next practices'. Our report has proposed many ideas to achieve this.

Fourth, the challenge of innovation in education and conversely, education in innovation. Look at the dramatic changes that are happening around us due to advances in Information & Communication Technology. Digitisation, virtualisation, mobilization and personalization are the four new megatrends. All these will lead to game changing cocreative, self-organising, self-correcting, borderless, globally distributed, asynchronous, dynamic and open systems. Data, voice and video will be delivered with the already existing 4G and the imminent arrival of 5G in India. The processes of self-learning, interactive learning and lifelong learning will undergo a sea change with all these paradigm shifts.

Our report shows the way to create not just digitalisation but a digital transformation in the entire process in our education system. But at the same time, we take a serious view of the existing digital disparity between the haves and the have nots, and make a case that new 'right to education' has to be 'digital right to education', with provision of digital access to every student in the state.

Fifth, we have the challenge of achieving excellence as well as relevance. Achieving peaks of excellence in research means having a continuous thrust on not only 'working' at the frontiers of research but we ourselves 'creating' new frontiers. In all our endeavours, be it in the fields of natural science, social science, engineering, or what have you, we are constantly being challenged through new breakthroughs and better, more sustainable solutions. This means we will always need to have an aggressive and relentless thrust on being ahead of the curve. Or in other words doing research that will help Maharashtra "lead" and not "follow".

But then relevance of the research to the economy and society is also so important. We must solve problems that need to be solved to make a difference to the poorest of the poor rather than merely those that can be

easily solved. Our report shows how we can achieve both excellence and relevance.

We realise that it is not the power of ideas that matter, but the power of execution. Therefore, we feel that a robust monitoring mechanism for implementation at the highest levels of Government is extremely important. An Empowered Group of Ministers may be formed to focus on the entire area of Education from School to Higher Education, Research and Innovation as well as Skills, Culture and Inclusion.

Further there are ideas that require resource, and there are those that require only political will. Therefore, the report identifies clearly what is achievable in short-term, mid-term and long-term.

In the main report, we have given the summary of the detailed recommendations that the sub-committees had given. But at the same time, we have provided the full reports of the sub-committees in the Annexure. The idea is to give full access to the thought process that led to the recommendations, while helping to create realistically actionable execution plans.

On behalf of the Task Force, I would like to thank the Government of Maharashtra and particularly Shri Uday Samant, Hon. Minister for Higher and Technical Education and Shri Prajakt Tanpure, Hon. State Minister for Higher and Technical Education for entrusting this prestigious assignment to the members of the Task Force.

My special gratitude to each and every member of the task force, who gave time, ideas, insights as also wisdom in abundance. And also to many leading experts, who contributed to this report selflessly.

Special thanks are due to the drafting sub-committee members, namely Dr. Abhay Pethe, Shri Vivek Sawant and Shri Nitin Pujar, who added so much further value while encapsulating the essence of the recommendations so brilliantly.

Last but not the least, sincere thanks are due to Shri O. P. Gupta, Principal Secretary, Higher & Technical Education Department and his hardworking team led by the dynamic Director Technical Education, Dr. Abhay Wagh, for their invaluable support.

Finally, I earnestly hope that the execution of the ideas in this Task Force Report will build in Maharashtra, education as a robust ecosystem that will create a powerful knowledge society that empowers and inspires every citizen. After all to be able to contribute, create, innovate and most of all enjoy knowledge and constantly remain curious, is the greatest endeavour of a human.

- Dr Raghunath Mashelkar, FRS

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Maharashtra Higher Education: Onwards to 2047

The State of Higher Education in Maharashtra needs to keep pace with its own past, and with the aspirations of its youth and society as a whole. Its economy has been growing and continues to lead in various sectors and its preeminence is acknowledged by the world.

Over the decades, Maharashtra has reformed, changed and aligned with the needs of its citizens with a committed, detailed and well crafted execution of development plans and outreach initiatives. Its education achievements and methods are often quoted as best practices by other states, and followed as such.

Whether it is distance education, district-wise outreach to the remotest districts, or creating a suitable framework for private trusts and societies to operate higher education colleges under its extensive university network, both public and private, it has always been ahead of other states. Its support for centrally funded institutions of higher learning and enablement of frameworks for inclusive access for all, are also in tune with times and well recognised as effective and impactful.

Today Maharashtra has 65 universities, 4731 colleges, 1962 stand alone institutions and 42 lakh plus students following higher education. Its GER is at 32.3% and growing. It has a well dispersed district-wise reach enabling students to access higher education from anywhere in Maharashtra.

Maharashtra has a pupil teacher ratio of 26:1 as far as higher education is concerned. It has 37 lakh students in UG programs, 4.7 lakh in PG programs and 12000 Ph.D. students enrolled in various HEIs. Its arts and commerce programs attract maximum number of UG students while its science students number second and Ph.D. enrollment in technical subjects is the highest. This is as per AISHE 2019-20.

As Maharashtra prepares for the future it has taken the digital shift in its stride with many impressive steps of leading through extensive investments and

policy enablements. During the pandemic and emerging post pandemic situation, it is preparing for blended learning systems ahead of some other states.

Maharashtra has historically worked on provision of public services with both local aspirations and resources being enabled, in tandem, to bring prosperity to all its citizens in a cost effective and positive way. In education, it has shown its ability to work with private societies and trusts to co-invest in higher education through legislative and policy support. It has also invested in standalone institution development initiatives, where needed. Schools, Colleges and University Institutions, both public and private, have emerged to serve society through this pervasive culture of priority for education.

The delicate balance needed to work with the national higher policies and frameworks, while supporting, developing and activating ground level execution is best seen in Maharashtra. A number of centrally funded institutions thrive in Maharashtra and a number of state level institutions take succour from Central Schemes and Initiatives for students and citizens at large.

Maharashtra has also led the Higher Education Teaching Talent pool creation through developing thousands of school and higher education teachers and legendary leaders. Many have thrived at high levels of academic leadership in its colleges, universities and have been elevated to UGC leadership levels too. Some have transitioned to international HEIs too.

Its initiatives, such as creating the first Sanskrit University at Ramtek-Nagpur, incorporating Maharashtra Knowledge Corporation Limited (MKCL) as a leading state owned knowledge corporation, nurturing Institutes of national eminence such as ICT in Mumbai, and catalysing the foundation and growth of leading Groups of Educational Institutions like Rayat Shikshan Sanstha, Shivaji Education Society, Somaiya, Symbiosis, SIES, etc. show its ability to enable quality institutions to operate under its support. It's Public Universities such as SPPU, Shivaji University and Mumbai University as well as its new special subject specific university models such as BATU and MUHS have also

demonstrated the robustness of its operations frameworks and proof of the presence of the high quality talent that manages its higher education space.

As the NEP 2020 seeks to transform the entire Education Space through its directive vision, Maharashtra needs to lead the transformation with new ideas and roadmaps.

Maharashtra will need to take into account the far reaching changes around us: emergence of a digital society, hyper connectivity, paradigm shifts in learning modes and methods, innovative learning oriented pedagogy, 'anytime' holistic assessments, multi discipline choice based education, research as a key learning and innovation driver, and so on.

Maharashtra Task Force on Implementation of the NEP 2020: Genesis, Formation, Timelines

Maharashtra has been a leading State in the field of Education and Higher Education, in particular. The Union Cabinet approved the New National Education Policy (NEP2020) on 29th July2020. Since 'Education' is a subject in the concurrent List of the Constitution of India, both the State and Central Government are empowered to enact legislations on this subject within the ambit of law.

While addressing a Conference of Governors/Lt. Governors/ Education Ministers of States/UTs on 'Role of NEP 2020 in transforming Higher Education' on 07th September 2020, the Hon'ble President and the Hon'ble Prime Minister of India also emphasized on intensive consultation in States/UTs in order to obtain feedback of the stakeholders who will actually be translating the futuristic vision of the Policy into action.

With this background, the Ministry of Education solicited the views/opinions of various State Governments on the recommendations proposed in the NEP 2020 document, on the basis of consultations with the Stakeholders. Government of Maharashtra, Higher & Technical Education Department, therefore, set up a Task Force with the mandate to study the provisions of NEP

2020 and make recommendations regarding implementation of the policy in the State.

Higher & Technical Education Department constituted this Task Force vide Government Resolution dated 16th October 2020. Dr. Raghunath Mashelkar is the Chairman and Dr. Abhay Wagh, Director, Technical Education; MS is the Member Secretary of this Task Force. As per this GR, the Task Force was expected to submit its report within 3 months before 15th January 2021. The relevant Government resolutions and letters are included in this document.

Government of Maharashtra, Higher & Technical Education Department had, in parallel, set up another Task Force under the Chairmanship of Prof. Sukhdeo Thorat, for revisions to the Maharashtra Public Universities Act 2016.

A joint meeting of both these Task Forces was held on 3rd November 2020 at the Sahyadri State Guest House, Malabar Hill, Mumbai. Hon. Minister, Higher & Technical Education, Shri Uday Samant and Hon. State Minister, Higher & Technical Education Shri Prajakt Tanpure jointly addressed the meeting. Both these dignitaries enlightened the audience with State's expectations from the NEP 2020 vis-a-vis role of Higher Education in State's Members of these Task Forces and senior Government development. officials also attended the meeting. During the afternoon session, both the Task Forces conducted their separate meetings. Members of the Task Force on NEP 2020 were given a presentation regarding important provisions of the policy and their views/suggestions were solicited. It was also decided that members would share their views/comments in detail as well as relevant reference material. Considering the need for experienced and senior members with background of Public Policy matters, self-financed education, etc., it was decided to induct some more members with special domain knowledge on the Task Force.

The Task Force scheduled its second meeting on 23rd November 2020 online. Views/suggestions received from Members were classified into sub-groups or sub-committees based on some themes. During the meeting, this classification and formation of sub-committees was discussed. For the sake of

standardization of contents, the sub-committees were provided with a suggested Format of Outcomes.

The members were requested to examine the sub-committee themes, ToRs and Format of Outcomes. Their willingness was also solicited for working in one or more sub-committees of their choice. This activity was completed by 30th November 2020.

Sub-committees started their activities from 2nd December 2020 onwards. They conducted several online meetings before finalizing their outcomes. These meetings took place in the period: 2nd December 2020 to 16th March 2021.

The Sub-committees submitted their Reports during 24th December 2020 to 16th March 2021, as and when they were finalized. During this period, the Reports were circulated among all the members of the Task Force. Any other useful reference material shared by Members was also circulated.

In the meantime, it emerged that the Reports of sub-committees and hence the Final Report cannot be finalized and submitted within the original deadline due to ongoing meetings of sub-committees for deliberations. As an administrative arrangement, a request was submitted on 7th January 2021 to Government of Maharashtra for extension of the deadline. In response, the Government extended the deadline for submission of Reports to 30th June 2021.

On 17th May 2021, the third meeting of the Task Force was conducted, wherein each sub-committee presented important recommendations from their respective reports. A Spill Over session of this meeting was immediately conducted on 21st May 2021. A strategy for report writing was also discussed.

On 24th May 2021, a separate meeting was arranged for a specially created sub-committee for Report Writing. Tentative timelines were also decided so as to submit the Report to Government of Maharashtra around 24th May 2021.

The Report Writing sub-committee submitted its first draft on 31st May 2021.

Task Force Terms of reference, Working modes and Methods followed by the Committees and Sub-Committees

Members of the Task Force, in their initial meetings, discussed various provisions of NEP 2020, their potential impact in the long term and what needs to be done to enable its comprehensive implementation in Maharashtra. Members discussed their views and suggestions about various areas that emerged as crucial for action, change and innovative reform. Given the wide and deep ramifications of the NEP 2020 directives and their impact on current frameworks as well as operating methods and structures, it was felt that a deeper deliberative process was needed.

The Task Force decided to break out various focus areas into Themes to be deliberated by Sub-groups as Sub-committees. All the matters outlined in the NEP 2020 were classified into nine major Sub-committees on the basis of these themes.

Terms of Reference (ToRs) were framed under each Sub-Group theme. These ToRs were discussed with all members of the Task Force and suitably revised after this discussion.

Further, a format was also discussed by the Task Force regarding the outcomes expected from each sub-group. Each sub-committee was required to submit its Report on points like: What is the change compared to what was proposed in NEP2020? What is it that will be needed to be done by way of specific actions? What will be the order or priority of actions that will be most efficient and effective? Who will bear the responsibility of these actions? Do we need a new entity or do we assign it to existing entities? What is the timeline envisaged? What are the prerequisites for these changes to be effective? What, if any, can be the stumbling blocks and how may they be mitigated? Members were also requested to indicate, where possible, estimates of resources required: Financial Investments, Infrastructure Build-outs, Talent On boarding or Retraining, Capacity building, External Expert Support, etc.

The Task Force members then regrouped themselves in Sub-committees, with some members working in multiple Sub-committees considering their expertise, and prepared the Sub-committee reports after detailed deliberations.

The Sub-committees were given complete freedom to invite experts from academia, corporates, social sector, civil society and students, as they deemed necessary, in order to get more practical inputs about any specific area or matter. As a result, the reports are based on contributions, opinions and suggestions from renowned subject matter experts in addition to the members' own deep experience and expertise across various aspects taken up by each Sub-committee.

discussionsin the meetings, During the it emerged that some recommendations need considerable financial commitments and resources, other recommendations pointed to focused capacity building within the existing talent base; some recommendations can be implemented in a short span of time and some may require longer planned roadmaps. There were some ideas that can be immediately implemented, after State approval, as they need no structural changes or additional financial resources but simple directives. The Sub-committees have accordingly categorized and described them, as such, in their Reports and Recommendations.

Since, 'Education' is a subject matter of concurrent list, both the Central and State Governments can enact legislation. The NEP 2020 has itself pointed out to the fact that it will have to restructure and even legislate changes that it has proposed, which are work in progress. Hence, some provisions of NEP2020 can be implemented only after necessary detailed directives from the GOI.

Implementing some recommendations of this Task Force may require procedural, legal and administrative changes whose modalities need to be worked out in detail by other suitable executive teams, bodies and departments. The Task Force has thus kept its recommendations at a broader level and suggests that such details like specific and detailed implementation roadmaps be taken up in due course.

Members of the Task Force are aware of the fact that bringing excellence and quality in Higher education is not a one-time act but an ongoing series of activities through thorough planning and firm commitment from all stakeholders. While the Task Force discussions took due cognizance of national and international scenarios, the focus was primarily on State's Public Universities and HEIs as they are the fulcrum of change within the entire sector in Maharashtra.

Special Acknowledgements

The Task Force would like to thank all the invitee experts as well staff members of the Departments of Higher and Technical Education who have contributed to the entire proceedings, documentation and research during these tough times of the pandemic.

Our sincere thanks to Dr. Anil Patil, Shri Vivek Sawant, CA Ajit Joshi, CA Haren Sanghvi, Dr. Ganesh Devy, Dr. Nagnath Kottapalle, Dr. Dilip Dhondge, Prof. Uday Salunkhe, Dr. M. S. Unnikrishnan, Shri Venguswamy Ramaswamy, Shri Balalyer, Shri Rahul Belwalkar, Dr. Deepak Shikarpur, Ms. Suchitra Surve, Dr. Vijay Chavan, Dr. Shefali Pandya, Dr. Suresh Ukrande and Dr. Mrudul Nile.

The National Education Policy 2020: Rethink, Reimagine, Reinvent Maharashtra Higher Education

The NEP 2020, as a direction document, seeks to reform decades of education interventions that have delivered, at best, a middling performance relating to mass education.

Maharashtra has done well through its own mix of government supported education interventions directly, as well as through the private providers' framework, both at school and higher education levels.

Preparing to articulate and implement changes declared through the NEP 2020 policy document is a good opportunity to reform and reimagine Higher Education for Maharashtra. The challenge is, however, that of speed, scale, quality and sustainability. As an analogy, consider the RBI reforming the

cooperative banking system while keeping all of its operations effective on one hand or SEBI seeking to regulate stock market activity while the stock exchanges are hyperactive, on the other.

The Higher Education sector is like a continuous process system that will continue uninterrupted while we try to modify and transform it. The entire sector needs to reorient current talent while attracting better talent and developing capabilities to meet with the challenge of rapidly changing demands in the future. The challenge of rising inequality, disparity and diversity needs to be addressed with sharp focus and astute planning. The State will need to invest in new areas and abilities and regulate with a light touch, to succeed.

The attention to education and higher education has to be at the same level and scale as defence, healthcare and exports. Defence has the Central Government funding it a 100%, Healthcare has emerged as a shared pay model between the State and Private Sector, thus investments are made by both and provision of services occur through both. Exports are pure private plays where the private sector offers services privately with a high quality and efficiency mandated by the end consumers, yet operate in an incentivised and supportive government policy framework.

Education appears to be heading towards an enduring public private partnership model where the role of private sector is inevitable. If this ends up as investments only for large education delivery systems while ignoring research and innovation, it will be a big miss. High quality research and symbiotic industrial partnerships will also be equally important goals for the education sector in the State.

Winning back space for mass higher education through a combination of highly effective education delivery models and well funded HEI based research, is the only way forward. The HEIs' role needs to be more research-institution based and needs a major shift of focus away from being only an education delivery node.

Another issue is that Maharashtra does not have a policy of investment in research akin to the Centre. It needs to establish a research investment strategy for the State itself. Allocation of a certain percentage of state budget for pure research will be a good starting point. These funds may then be allocated through a State Research Foundation or Council to HEIs to conduct suitable research projects with local focus and encourage HEIs to work with industry and create a true academia-industry connect for value to all.

The Existing Frameworks and Status: Higher Education in Maharashtra

Maharashtra is at an inflection point and needs to take the right direction in terms of policy, investments and activation in the Higher Education space.

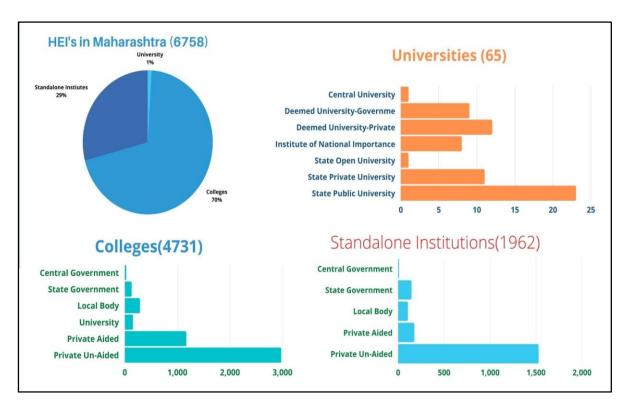
It has been in a lead position with its large and well-spread network of universities, institutes and colleges across the state. Its constant striving to reach higher education to every corner of the state is well documented.

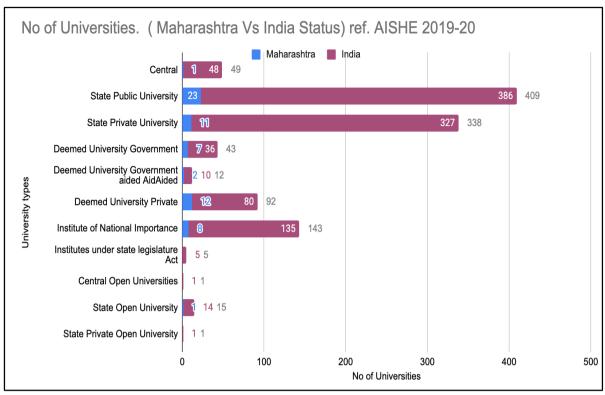
Sr. No.	University Type	Number of Universities			
1	Central University	1			
2	Deemed Universities-Government	9			
3	Deemed Universities-Private 12				
4	Institutes of National Importance 8				
5	State Open University	1			
6	State Private Universities	11			
7	State Public Universities	23			
		65			

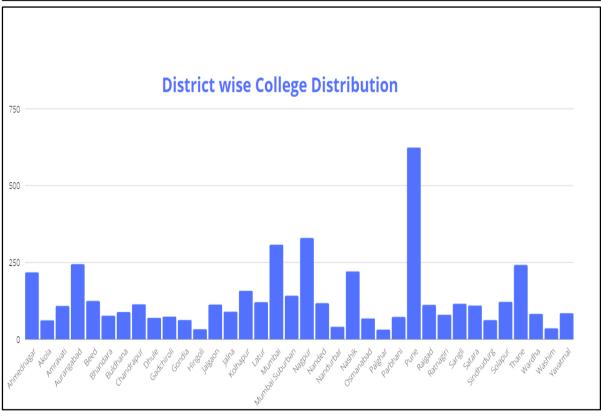
District Wise Distribution of Universities, Colleges and Standalone Institutes:

Source: AISHE - 2019-20







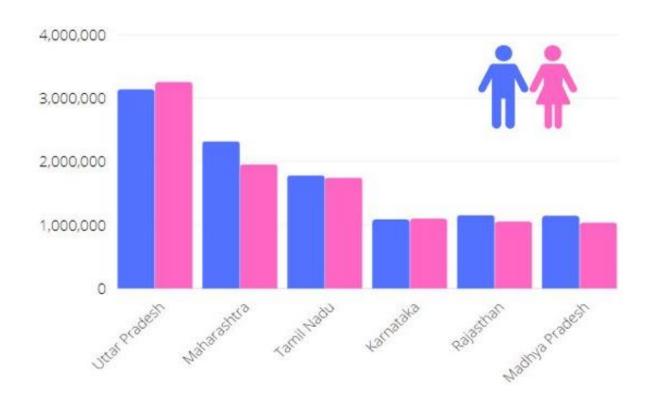


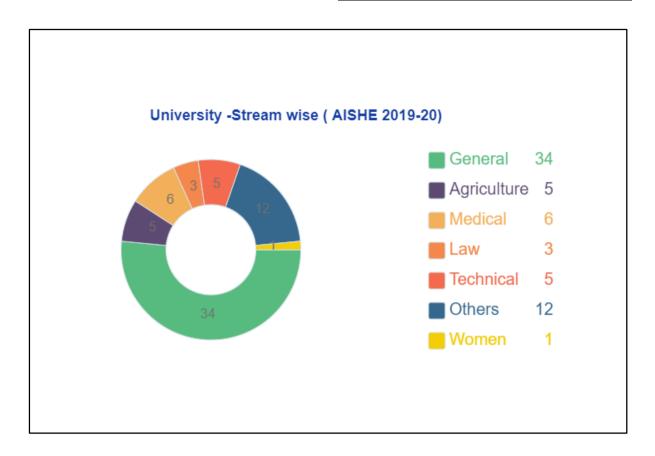
Gender Distribution Top 6 - The top 6 States in terms of highest total student enrolment Male-Female Break Up

Sr. No.	State	Male	Female	Total
1	Uttar Pradesh	3136650	3251564	6388214
2	Maharashtra	2313862	1951610	4265472
3	Tamil Nadu	1778186	1742125	3520311
4	Karnataka	1088883	1099009	2187892
5	Rajasthan	1151186	1055331	2206517
6	Madhya Pradesh	1144576	1037578	2182154

Male: Female Enrollment Ratio: Ref: AISHE 2019-20

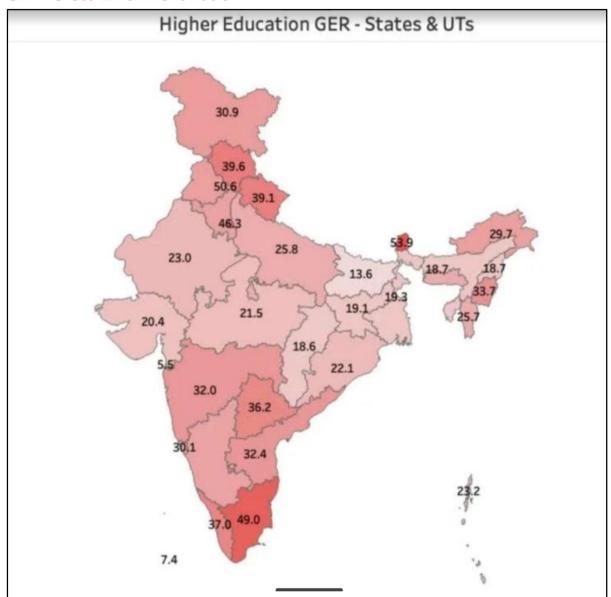
Top 6 States- Male: Female Enrollment Ratio



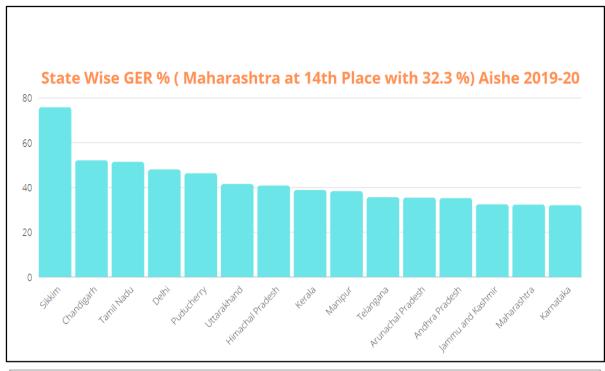


	Gen.	Agri.	Medical	Law	Tech.	Vet.	Others	Women	Total
Universities	34	5	6	3	5		12	1	65
Colleges	3024	98	1	90	54	6	1458	349	4731

GER - Gross Enrollment Ratio



Source: NIEPA, 2020



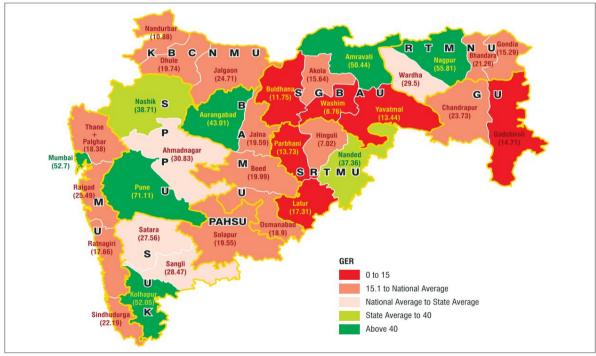


Figure 4.4 : GER (Overall, Total) map of Maharashtra. The data is for 2017-18.

Source: Re-engineering Higher Education in Maharashtra, Bhagwantrao Jagatap, Anil Rao and Anand Mapuskar, Published by University of Mumbai, 2019.

Maharashtra's GER averages 32.3plus and this is above the Nation's average. The GER is above 40 in districts such as Kolhapur, Pune, Aurangabad, Amravati and Nagpur, it is lower than 15 in Gadchiroli, Yavatmal, Washim, Buldhana, Parbhani and Latur regions. In districts under MU, the overall GER is highest in Mumbai (52.7) compared to other districts such as Thane and Palghar, Raigad, Ratnagiri and Sindhudurg, where the GER is less than half of Mumbai. This district-wise difference may be explained by development rates being a challenge due to various factors affecting access.

Its approach has been defined by Public University-led Affiliating College Systems with clear District defined operations in terms of jurisdiction and Private Aided and Unaided Colleges along with Polytechnics for technical programs. Private and Deemed University institutions also contribute to the GER while Public Universities are major contributors in to the volumes overall.

Over the years, it has encouraged private charity based trusts and societies to start colleges on aided and non-aided basis in order to be able to offer higher education in the true spirit of supporting aspirations with capacity building.

It has also created a suitable enablement framework for Unitary Universities to becreated and operated by Trusts/Societies, leading to 65 universities being present in Maharashtra. It has Public Universities, Central Universities, Deemed Universities and State Private Universities.

All Affiliating Colleges are under the Public Universities and there are new policies implemented that allow for Autonomous Colleges to emerge and operate independently. Students are now able to choose their higher education pathways more easily than before.

Policy initiatives have also been taken up to enable HEIs to improve quality (NAAC, Clustering, etc.) and quantity (distance learning, approval of seats' increases, new institutions).

The overall cost of education is low by any standard, even in the case of self financed courses, reflecting the success of a volume based availability and affordability approach that assures a good GER achievement strategy. The quality, however, continues to be a concern (NAAC, curriculum stasis, low industry connects, employability of students being low, etc.).

The Equity and Inclusivity challenge centers around achieving affordability of, and also the cost of, staying in the learning mode for students. This is a grave challenge.

Keeping the fees low has weakened the Public University/Affiliated Colleges System that depends on direct State Grants, even as salary burdens increase over time. The fee regulation reform keeps eluding the system, especially in the Public University context.

A transparent assessment and communication of this situation is needed.

Self Funding models followed by Private Universities and Colleges have shown a willingness to pay self financed levels of fees, albeit at the higher income segments of society, this needs to be harnessed to enable the weaker segments to be actively supported for full cost, including stay and living expenses. Cross Subsidy systems may be used to do so.

Recognition of full costs and funding those needing funding, is the key to solving this challenge.

The comprehensive Goal of achieving higher GER, through excellent quality of education and higher participation rates of students will need a major relook at many areas like Governance Reforms for greater Academic Autonomy, Restructuring for better reach and quality, Major overhaul of Curriculum, Assessments, Learning Systems and Pedagogy, reorienting the systems to be Student Services Centric and Teacher Talent Capacity building.

We need to start our journey towards the new paradigm of quality education in the new digital learning age, today.

The Proposed changes as per NEP 2020 Key Areas

The NEP 2020 is a document that covers school education as the foundation of the entire Education Policy Framework. Higher Education has been covered in chapters 9 to 27. This is the focus of this Task Force.

Section 9	Vision for India's Higher Education System					
Section 10	Areas detailed out for Restructuring and Consolidation					
Section 11	Holistic and Multidisciplinary Education					
Section 12	Optimal Learning Environments and Student Support					
Section 13	Motivated, Energised and Capable Faculty					
Section 14	Equity and Inclusion					
Section 15	Teacher Education					
Section 16	Reimagining Vocational Education					
Section 17	Quality Academic Research: NRF					
Section 18	Transforming Regulatory Systems in Higher Education					
Section 19	Effective Governance & Leadership for HEIs					
Section 20	Professional Education					
Section 21	Adult Education & Lifelong Learning					
Section 22	Promotion of Indian Languages, Arts and Culture					
Section 23	Technology Use and Integration					
Section24	Online and Digital Education: Ensuring Equitable Use of Technology					
Section 25	Strengthening CABE					
Section 26	Financing Affordable Quality Education for All					
Section 27	Implementation					

While all of the above areas were thoroughly discussed by experienced members of the Academic Leadership in the State and Experts, as members of various Sub-Committees and Sub-Groups, a lot of studies and data gathering was also initiated in order to bring up a cogent set of frameworks and actionable recommendations. Numerous silent experts also worked and shared their insights and enriched the deliberations, reports and notes.

The Notes below include a glimpse of those insights and recommendations, in brief form, as deliberations of Nine Sub-Committees. The detailed reports of the Sub-Committees are also annexed for reference.

- 1 Restructuring
- 2 Curriculum
- 3 Committee for Teacher Education
- 4 Governance
- 5 Digital Education
- 6 Academic Research & Vocational Education
- 7 Inclusion & Equity
- 8 Languages & Arts
- 9 Finance

The Notes bring all of the recommendations and ideas together.

Recommendations

1. Restructuring

Transforming State Higher Education Regulatory Structures: Light but Tight

The Sub-Committee consisted of the following eminent members – Prof. Sukhdeo Thorat – Chairman, Prof. Vilas Sapkal – Member, Dr. Anil Patil – Member, Dr. Devidas Golhar – Member and Shri Milind Satam – Member. A detailed Report on their deliberations is appended in the Annexures.

Introduction

The NEP 2020 has offered a clear mandate for change and a complete overhaul of the Higher Education space for the Nation. It has suggested wide ranging changes for all stakeholders in a manner that one may accurately call it a National 'Restructuring" Policy for Education.

Transformation starts with restructuring, and thus makes restructuring both crucial and critical. Critical, as it seeks to 'change' a running system or operation that is in full motion. It involves millions of people: students, teachers, staff, service providers and end users such as Industry and even the Government itself.

Education provision is in many ways the pinnacle of services on par with Healthcare and Security as far as the Government is concerned. It affects society as a whole socially, economically and aspirationally. It informs, shapes and delivers value to each and every citizen and thus needs to be devised with abundant care.

The Sub-Committee on Restructuring has thus had the task of reimagining and planning the transition of the current operative framework of higher education services in the State of Maharashtra. It proposes to do so through keeping the good, devising the better and delivering the best.

While doing so the State of Maharashtra will need to make sure each stakeholder is prepared, trained, enabled and empowered to work towards the goals with minimum disruption and maximum confidence. From changing durations of programs, introducing innovative pedagogy and even bringing in new formats of delivering higher education, the NEP 2020 envisages moving to a radically new system over the next fifteen years.

Higher Education will need to change to attract students, investments and talent at a scale that is, on a conservative basis, five to ten times in volume and resources.

Restructuring in this context is like refitting an aircraft carrier at sea, in the middle of a war.

Recommendations:

- Universities' Formats Concept Implementation: Unitary Universities, Cluster Universities and Degree Awarding Colleges

 The new formats that HEIs need to move towards necessitates that the State create a Comprehensive Plan for the same. It will need to be done with a study of the current status of all HEIs and Colleges as to their sizes, capacities, legal status and need of resources. This Plan will need to be made with formation of a team/committee that will access high quality information, analyze it carefully and create a detailed action plan and roadmap.
- 1.2 The UG/PG Structure transition from 3 year to 3/4 year duration
 All universities will have to conduct a comprehensive survey and
 decide on subjects, outcomes sought by industry and society at
 large around their area and the state overall. This applies to UG
 and PG as well as Doctoral work. The Government should set up a

Committee to prepare a Plan and Implementation Document as a key first step in this process for all HEIs to be able to follow as a transition blueprint.

1.3 Academic Bank of Credits

A Plan to establish a uniform Academic Bank of Credits across all State Universities is urgent. The undergraduate and postgraduate degree will be of various durations, with multiple exit options within the course. A need to have a robust method to cause credits to be transparent, well recorded and accessible to all stakeholders for the proposed multidisciplinary and choice based credit environment is a must. In addition the methodology for equivalence led by respective HEI Dean's Committees in various HEIs across various programs for transfers from and to national and international HEIs will need to be built to support a seamless credit banking system.

1.4 The Change from Affiliation Model to Unitary Institutions

State Government needs to develop a policy and plan for clustering of the institutions along with the detailed guidelines considering the competency, compatibility and interest of institutes, regional needs, viability of clustering, etc. This should lead to sharing of strengths and overcoming weakness of institutes for mutual benefits so as to utilize the resources effectively for quality improvement. The exercise of developing Cluster universities will have to be operationalized in a manner such that it meets the goal of easy and affordable access to students from rural areas to quality education. If HEIs choose to move to autonomy and unitary models as they evolve, they must be enabled to do so through proper support and capacity building mechanisms for minimum disruption to all stakeholders.

1.5 Elevating 50 years plus exemplary Groups of Institutions to University Status through Invitation

The Opportunity to de-affiliate in a positive manner is a radical thought. This is an opportunity very few states of India have. Maharashtra has been a leading State in its higher education achievements on the back of a diverse set of Institutions across the State run by the Government and also by Societies and Trusts that are today extensively spread out. Numerous Groups of Educational Institutions with exemplary achievements of more than 50 years of successful operations thrive across Maharashtra. These top Groups of Institutions should be invited to be Universities that will take all teaching institutions of HE under one roof with relaxation or modification of the jurisdiction restriction that they operate under today. These Institutions shall continue to receive all the funds, support and privileges that they currently have been granted from the State when they are elevated to their new University status. This may be done to celebrate 75 years of Independence on 15th August 2022, a fitting re-dedication to the Nation and Maharashtra.

1.6 Autonomy and Graded Autonomy

The existing regulation for granting Autonomy to the institutions by UGC and State Government may be modified to accommodate parameters and criteria of Graded Autonomy. The MPU Act, 2016 has provision in section 122, 123 & 124 for granting autonomy to university departments or institutions, college or recognized institution, empowered autonomous colleges and empowered autonomous cluster institutions. Plans should be put in place for the number of institutions to be granted graded autonomy along with predetermined criteria. Universities need to prepare perspective plans to this effect. A State level Accreditation Council should be established to facilitate speedy decision-making and execution.

1.7 Mentor-Mentee Programs

Maharashtra needs to devise and communicate a robust and formal Institutional HEI-College Mentorship program through a

suitable Empowered Task Force with appropriate funding and support from the Centre.

1.8 Moving to Multidisciplinary Education at all HEIs

A State Level Blueprint or Roadmap involving all the various Universities including Private, Deemed and Central HEIs in the State of Maharashtra will be important in making sure that all HEIs are able to serve students and become flexible enough to transition those through to the Multidisciplinary Research oriented learning ecosystem. A Multi Institution Committee including VCs of all HEIs in Maharashtra should be constituted to develop such a Roadmap to 2035.

Key challenges are in the realm of actually planning as to which disciplines need to be added to existing HEIs as per local needs and alignments with their industry linkages.

A detailed count and assessment of the demand and supply situation relating to various disciplines in terms of seats and interest of students as well as talent seeking sectors is crucial. This will inform all about the right mix needed.

1.9 Appointment of Teachers and the Teaching Talent Challenge

A detailed state level plan based on institutional development plans of various universities and colleges has to be framed for amendments of provisions as per the recommendations of the policy to ensure the quality in education. This will include performance assessment parameters, probation, promotion, service to institute, society, etc.

At present the critical problem is that of shortages of teachers in colleges and universities. This has affected the quality. It is proposed that the State government should estimate the shortage of faculty in universities and colleges (aided and government) taking into consideration student: teacher ratios prescribed by the University Grant Commission, and then develop a medium term

plan by allocating resources to appoint and increase the faculties in colleges and universities as per the student: teacher ratio proposed by UGC. The Central Government should also supplement the expenditure by contribution funds for at least ten years through transfer under Finance Commission and other channels.

1.10 Internationalization

The existing education institutions will need to be prepared for the severe competition till they are able to undergo the proposed transformation.

The State may follow an alternative way of entry to foreign universities. This model is to permit foreign universities through collaboration with Indian universities /institutions. This will involve collaboration in teaching, exchange of faculties for teaching and student exchanges between Indian institutions and global institutions. Credits acquired in foreign universities will be permitted; where appropriate as per the requirements of each HEI, to be counted for the award of a degree. The dual degree will be followed. The advantage of this way of entry to foreign universities is that it will encourage capacity enhancement of collaborating Indian Universities/Institutions.

The foreign universities proposed to be set up being costly; meritorious students from weaker sections will face a challenge of access. So the government will have to develop schemes of financial assistance to these students through scholarships and other means.

2. Curriculum Framework

Reimagining the Learning Framework: Curriculum, Pedagogy, Assessments and New Outcome Focus

The Curriculum sub-committee members included: Dr. Rajan Welukar as Chairman, Dr. G. D Yadav, Dr. Vijay Chavan, Dr. B. B. Ahuja, Dr. Shefali Pandya, Dr. Suresh Ukrande, Shri Nitin Pujar and Dr. Mrudul Nile. A Detailed Report on Curriculum Design and Framework is appended in the Annexures.

Introduction

The NEP 2020 has proposed a visionary reform of curriculum frameworks with its ambition of a holistic and a renewed Graduate Student Outcome who is expected to be a well rounded, self driven knowledge seeking, innovative and creative researcher.

The Graduate is expected to be part of a learning system that is multidisciplinary as well as research intensive. The Graduates will often have individualized learning plans rather than standard curriculum teaching plans. Assessing such graduates means that even the Teaching talent will have to be enabled to be open and equally prepared to assess with new approaches that will be more continuous rather than end term basis through exams alone.

The fact that Research is the centerpiece and focus of all of the NEP 2020's vision means a State level institution that plans, envisions, directs and celebrates this major area is a must. Maharashtra State Responsible Research and Innovation Council (MSRRIC) will be that council. 'Responsible Research and Innovation (RRI) implies that societal actors (researchers, citizens, policy makers, business, third sector organisations, etc.) work together during the whole research and innovation process in order to better align both the process and its outcomes with the values, needs and expectations of society.

Recommendations:

2.1 Curriculum framework for three/four years multi-disciplinary UG and PG programme

- a. Maharashtra Deans Consultative Committee shall be established.
- E-Board of Studies Forum (E-BoSF) to be represented by the chairperson of BoS of respective subjects of all the universities should be established (E-BoSF)
- c. Those who would be adopting four years' bachelor's degree programme will have to spend the last year completely on research component or internships or industry training.
- d. Synthesizing degree is now an international standard adopted by all the universities all across the world. The committee recommends that degrees be synthesized as per the choices of the individual learner. While synthesizing their degrees, there shall be no bar or restriction on the subjects/courses across the disciplines.
- e. While developing a curriculum, 21st Century Curriculum Design Framework based on Design Thinking should be used.

Post-Graduate Programmes

- f. The PG programme should be of purely theoretical nature or in applied research or combination of both or purely by research in nature.
- g. Post-graduate programme should integrate internship.
- h. The universities may also start parallelly, five year integrated Master's Degreeprogrammes.

2.2 Doctoral (Ph.D.) and Post-Doctoral Programmes

i. Doctoral students should engage in teaching as a substantial part of their learning experiences. They should take a one-semester course/seminar on teaching.

j. Not many universities in Maharashtra have post-doctoral programmes. All the State universities must encourage researchers to undertake research in post-doctoral programmes. The government and the universities should roll out scholarships and fellowships for promoting such postdoctoral research.

2.3 Teaching Learning Process

- a. Less classroom based teaching: developing customized and activity based learning eventually leads to a situation where people can learn most of what is now taught at college level through digital devices, anytime and anywhere.
- b. Today's students are learning in the universities/colleges through media, Internet and different social networks to which they belong. As a result, they are finding teaching in universities and colleges less relevant, because they have already learned what is meaningful for them elsewhere. Therefore, we need to rethink universities/colleges so that learning relies more on customized individual learning plans and less on teaching from a standardized curriculum.
- c. Focus on holistic development: Teaching and learning should focus on deep, broad learning, giving equal value to all aspects of a group or individuals personality, moral character, creativity, knowledge, ethics, social skills, empathy and leadership. The aim of the universities/colleges should be to find each students talent.

Integral Education Learner Wheel



2.4 Assessment and Evaluation

- **2.4.1** The universities should move mostly towards assessment based on reflection (Assessment as learning).
- **2.4.2** The universities/colleges should move from traditional way of thinking to contemporary ways of thinking about assessment. For example,

Traditional Approach to	Contemporary Approach
Assessment	to Assessment
Planned and implemented	Carefully aligned with
without consideration of	learning goals. The most
learning goals if any even	important things we want
exist.	the students to learn.
Often focus on memorized	Focused on thinking and
knowledge	performance skills

Often poor quality, simply because faculty and staff have and best practices on had few formal opportunities teaching and assessment to learn how to design and methodologies. effective use assessment strategies and tools.

Developed from research

Used only to assess and grade Used to improve teaching individual students, decisions about changes to success as well as to curricula and pedagogies assign often based on hunches and anecdotes rather than solid individual students evidence.

with learning and student grades and otherwise assess

Used only in individual course Viewed as a part of an sections; not connected to integrated, collaborative anything else.

learning experience

Not used to tell story of our Used to tell our story: successes; stories are told what makes our college or through anecdotes about star students rather than broader evidence from representative in meeting societal and students.

programme distinctive and how successful we are student needs.

2.5 Scoring and Grading

- **2.5.1** All the universities must shift from absolute to relative grading system.
- **2.5.2** Convert raw scores to T-scores, which is universally accepted.
- **2.5.3** Universities should follow Ten Point grading as per the UGC recommendations in effect.

2.6 Choice-Based Credit System

- **2.6.1** All the universities should implement Choice Based Credit System in Maharashtra.
- **2.6.2** The same, uniform terminologies should be used by all the universities in the state of Maharashtra.

2.7 Maharashtra State Responsible Research and Innovation Council (MSRRIC)

The committee is of the view that the State government shall establish the Maharashtra State Responsible Research and Innovation Council. This council shall be the apex body to oversee, guide, mentor, fund, incentivize, build capacity for quality research across all disciplines and direct the research activities in the State universities by framing a broad policy.

This council shall be established through an Act by the State government as an autonomous body of the State of Maharashtra.

This council should have organic linkages with other key agencies in the state that are linked to research and innovation, such as Maharashtra State Innovation Society, Rajiv Gandhi Science and Technology Commission, etc.

This council shall be established through an Act by the State government as an autonomous body of the State of Maharashtra.

3. Teacher Education

Teacher Education Task: Educate, Enable and Empower Teachers

The Sub-Committee for Teacher Education was Chaired by Dr. Shahshkala Wanjari, Members included: Dr. Rajan Welukar, Shri Vijay Kadam and Ms. Suchitra Surve. Additional inputs from Shri Vivek Sawant were also taken up in the Detailed Recommendations.

Introduction

The Teacher Education challenge is the bedrock of the entire NEP 2020 Policy and as such will need to be devised carefully taking into account the States' past, current and future teachers both for school education and higher education.

The GER ambition for the Nation as well as the State is 50% at higher education levels and 100% at the school education base. This means we will need a large number of teachers across the totem from ECCE to schools to Higher Education.

Both pre-service as well as in-service teachers' training and learning systems will need a fresh look and re-imagination.

Continuous quality monitoring of Teacher Education Institutions (TEIs) as well as planning will be needed at HEIs and State levels. Use of technology in assessments and research capability building is a must.

A State Level Committee including Experts and Public and Private Institutions is absolutely necessary as a first step.

Recommendations

3.1 Constitute a State Level Committee for Teacher Education Institutes for NEP Implementation in B.Ed. Program

In order to implement the NEP in TEIs, such as B.Ed. colleges, at State level, a committee of teacher education experts representing public and private universities in the state may be expressly constituted.

3.2 Assurance Guidelines for B.Ed. Program

A common curriculum and set of guidelines for quality assurance designed by this committee may be adopted on a statewide scale for all TEIs offering B.Ed. Program.

3.3 Develop and Deploy a Common Internal Quality Assessment and Assurance System Portal for TEIs

The Directorate of Higher Education may consider getting developed an evidence-based Smart Internal Quality Assessment and Assurance System (SIQAAS) for all TEIs in the state and getting it deployed for all TEIs on a central portal and making it mandatory for all TEIs to use and comply with it.

3.4 Devise a State Entrance Test for B.ED., not through NTA

GoM may decide to admit students to B.Ed. Program in TEIs through a state-level entrance test instead of unduly centralized test by NTA, which may be devoid of local contexts, languages, locally relevant criteria, etc.

3.5 MSFDA to be the State Nodal agency for Higher Education Institutes' Teacher Education

With the due concurrence of the GoM, Maharashtra State Faculty Development Academy (MSFDA) may be entrusted with the role of nodal agency with adequate financial support to design, develop and launch the online or blended credit courses in teacher education for in-service teachers of HEIs. This may be done in close collaboration with HRDCs in the universities. A novel academic and business model to revitalize HRDCs as Centers of Excellence for Teacher Education in emerging knowledge society may be conceived and implemented.

The above-mentioned credit courses should be in theoretical as well as applied topics in New Pedagogy for professional development of in-service teachers of HEIs. Satisfactory

completion of these courses may lead to earning appropriate Theory Credits (TCs) and Role-Based Credits (RBCs). These credits may be included as one of the Annual Performance Indicators (APIs) in annual performance appraisal of the in-service teachers of HEIs.

3.6 Introduce Theory Credits and Role Based Credits in New Pedagogy to Ph.D. Entrants

All Ph.D. entrants may also be oriented for teaching profession through the above-mentioned credit courses leading to Theory Credits (TCs) and Role-Based Credits (RBCs). This will enable Teaching Methodology to be added ab-initio into the course of study for all Ph.D. students making them teaching-ready should they choose to align their careers to HEIs.

4. Governance

Governance Framework: Enable, Guide, Direct, Self Govern

The Sub-Committee was Chaired by Dr. Suhas Pednekar and Members included Dr. Dhanraj Mane, Prof. Vilas Sapkal, Dr. Abhay Pethe and Dr. Ajit Joshi. Detailed Report of deliberations is appended in Annexures.

Introduction

With NEP 2020 goals of transforming the makeup of HE sector firmly in mind, the current set up has been examined and appropriate changes suggested.

The suggested changes will quite easily be brought about, but to be operationally effective there will have to be great deal of work done. This will involve capacity to use the proposed governance structure by stakeholders especially at the top.

The ultimate goal, of course, being transformation of students into human resource that would at once engage with professional scholarship and the broader societal concerns.

'Governance' is a much-bandied term and we suggest a simple definition in terms of four components. Governance is usefully seen to comprise four buckets.

One, any **Policy as well as the Policy Framework** that are informed by basic principles, chief amongst those being incentive compatibility;

Two, **Processes and Protocols** that are simplified (e.g., single window) in order to reduce transactions costs;

Three, and most importantly, **Extant Capacity and its building** (where data and implementation skills are most important);

Four, create an **Independent Evaluation Office** (IEO) for monitoring and evaluation, so that one can tweak and undertake mid-term course correction.

At the heart of the transformation conceived by NEP 2020 is **autonomy**, which has to be truly understood and implemented in spirit and letter by all the stakeholders. The true meaning of arm's length has to be drilled into the psyche of all concerned and the current practice of interference even in day-to-day matters should be strictly avoided.

The approach and recommendations are guided by the following overarching principles:

- (i) Autonomy and Flexibility to attain quality outcomes for students
- (ii) Clarity of purpose and vision stated upfront in public domain;
- (iii) Clarity in roles and responsibilities of Executive Bodies;
- (iv) Continuity in realization of governance across regimes overtime;
- (v) Transparency in actions and hence accountability with leveraging technology;
- (vi) Continuous Engagement via dialogue with all stakeholders especially students.

The idea is that the new system should be nimble, operate efficiently in decision-making and finally, attain desired outcomes. In a word, a capable system that is autonomous in the true sense of the term.

Recommendations:

4.1 Harmonized Acts for all HEIs in Maharashtra. The entire sphere of HE sector be governed by Acts which should be informed by minimalism and provide a uniform shell for all Universities and HEIs in the State.

One important caveat is that while embarking on this journey, the State should not declare policy decisions that would be contrary to the letter or spirit of the proposed transition.

- 4.2 Complete Digitalization of all University & HEI Processes Move towards complete digitalization of processes in the Universities and HEIs.
- 4.3 New State & HEI Governance Structure for Higher Education
 The following should be the Structure at the State level and the
 University/ HEI level:

A. State Level

- (i) Chancellor (Governor of the State)
- (ii) Maharashtra State Council for Development of Higher Education (MSCDHE)
- (iii) Board of VCs (BVC)

B. University/ HEI level

- (i) Chancellor (As per UGC Directives depending on the type)
- (ii) Society Partnership Council (SOUL)
- (iii) Management Council
- (iv) Board of Deans
- (v) Academic Council
- (vi) Schools Structure to attain decentralized decision making
- 4.4 Smaller, Slimmer, More Continuity, More Congruence
 - 1. MSCDHE, as proposed, is expected to be truly functional; it may be metamorphosed into something else by new name

- depending the 'Act' Committee report or may replace the current Apex Council by suitable modification.
- 2. All the Councils or Authorities of the University (Management Council/Academic Council, etc.) should be much smaller than the current size.
- 3. The number of layers of authorities should be significantly reduced.
- 4. The plethora of authorities/committees chaired by the VC should be reduced as far as possible. The system efficiency will be enhanced and VC can then function effectively as an appellate authority.
- 5. SOUL replaces Senate in a much slicker form.
- 6. The crucial appointment of VCs needs a serious relook and call for applications should be reviewed and should be done through a detailed search, nomination and invitation-for-applications protocol.
- 7. Almost in all cases, the members of various Authorities and Committees have been nominated/chosen by position with the VC predominantly having a final say. The autonomy, we believe to be important, has to be empowered in order to be truly effective. We believe in choosing the leader well and then giving him/her his/her executive team. We therefore, for example, have provided for the VC choosing his PVC. In making the nominations, by the VC, it is expected that competence and eminence will be the deciding factor and some of the Alumni in this category may be considered.
- 8. One of the shortcomings of the extant system is that the authorities are almost all self-dissolving at the end of the term of (say) the VC. The initiatives of medium or long-term nature are a casualty since most there is no formal purveyor

of institutional memory left. It is, therefore recommended that the membership of a fraction (say 1/3) of some of the important authorities (MC/ AC/ SOUL) should be perpetual following the precept followed by Rajya Sabha in India or US Congress.

9. Board of Vice Chancellors (BVC) is being proposed as an authority that will be a collective of all the VCs of all types of entities in HE sector. The BVC will be functionally proactive in sharing of best practices and serve as a discussion, solution and representation forum for any and all relevant issues that may arise in HE sectors. The relevant deliberations here will feed into the Apex Body for implementation.

While restructuring the current HEIs as per the vision of the NEP 2020, we will have to:

- a. Wherever feasible, try to make viable clusters of the existing small single faculty colleges and transition them into multi-faculty universities/HEIs; the colleges becoming the constituent colleges.
- b. Transform the existing traditional university campuses into either research-intensive universities or teaching-intensive universities.
- c. Support and enable the deemed to be universities to transition into either research-intensive universities or teaching-intensive universities as per their capacity.

4.5 Constitute High Powered Committee for Transformation as per NEP2020

A high-powered committee assisted by external team/cell/agency (or more than one such) for different geographies and typologies, should be constituted to assist the HEIs in smooth transformation to NEP 2020based educational structure. This would also include creating prototype manuals for processes and

protocols inside each type of HEI. Logically, then four verticals will have to be dealt with viz. Academic Development, Evaluation Practices, Financial Code and processes and Administrative system.

All the recommendations made here require additional agents and agencies (Deans, PVCs, and Directors to name a few instances). These have financial implications that we recommend that the government undertake to bear over a committed finite period without any reservation. It would perhaps be a good idea to identify the various such areas of financial requirements from all the operational recommendations and to separately estimate the quantum of resources required and further try to fit in within a realistic time frame under realistic assumptions of the potential resource envelope likely to be available to the State government.

5. Digital Education

The Digital Citizen based Knowledge Society:

Preparing for the Emergent Digital Life-Long Learning Society

The Sub-Committee was chaired by Shri Vivek Sawant and its Members included Shri Balalyer, Shri Rahul Belwalkar, Dr. Anil Patil, Dr. Deepak Shikarpur, and Prof. Ajit Joshi.

Introduction

Digital enablement all stakeholders of Higher Education in general and that of students in particular is the very core that will drive the entire Education Sector forward as the world turns digital around us. All education needs to undergo an appropriate digital transformation for its survival and success.

The National Education Policy 2020 in its Part III i.e. 'Other Key Areas of Focus' has dedicated Chapter 23 for 'Technology Use and Integration' and Chapter 24 for 'Online Digital Education: Ensuring Equitable Use of Technology'. The recommendations given below attempt to realize the vision and goals given in these chapters and also attempt to address the concern therein for bridging the digital divide.

In its Part II, NEP 2020 has also set an ambitious and transformative agenda for higher education including achieving 50% GER of by 2035, implementation of choice-based credit system, holistic and multi-disciplinary higher education leading to Designer Degrees, institutional restructuring and consolidation for achieving high standards of quality, optimal learning environments and student support, equity and inclusion, expanding the foot-print of open distance learning, higher education in local and regional languages, mainstreaming of vocational education, curbing commercialization, effective governance, light but tight regulation, etc.

The recommendations given below also attempt to provide an enabling platform and supportive ecosystem to successfully implement all the above-mentioned aspects of the NEP's transformative agenda in the near future and in an affordable manner.

Recommendations:

Maharashtra's Higher Education sector is beset with six simultaneous challenges of becoming Bigger, Better, Cheaper, Faster, Wider and Deeper!

We need to create and sustain a distinctively different and superior higher learning environment, a vibrant and academically stimulating culture and a scholarly mindset among the youth. We need to inject new hope and enthusiasm among them for deeper pursuit of knowledge and curiosity and participate in solving real problems of industry and society. High quality Digital Education complementing the traditional education, if made universally accessible, holds a great promise.

The recommendations are given in the form of proposed "Digital Rights Manifesto of Students". The recommendations are predominantly oriented towards "Direct Student Empowerment".

- 5.1 Free Digital Devices and Infrastructure
- **5.2** Free Access to all Digital Learning Resources
- 5.3 Free and Open Access to Accreditation, Assessment and Employability Resources
- 5.4 A Rights-Based Access to eldentity and eGovernance Services
- 5.5 Financial Investment for Digital Education and its Justification:
 - 1. Annual investment for the state-wide digital education transformation will be approximately Rs.3,000 Crore for about 3 million student-beneficiaries starting from 1 million in 2022-23, 2 million in 2023-24, 3 million in 2024-25 and new 1 million in each of the subsequent years. This means a per student per year investment will be about Rs. 10,000 and it will have to be done for 3 consecutive years. For programs of 4 years or more, the investment beyond third year will be marginal.

- Currently annual cost per student in non-professional colleges is about Rs. 55,000+ and for professional colleges like engineering it is about Rs. 80,000+. Apart from large number of qualitative and quantitative benefits enlisted in above-mentioned recommendations, with an addition of Rs. 10,000 for complementary Digital Education, the GER of HEIs can be increased from 27% to 50% without any significant addition to the brick and mortar infrastructure of colleges.
- 3. At 12-18% additional cost per student per annum, apart from several benefits to students and qualitative transformation of Higher Education in the entire state, there will be a considerable saving on the institutional front in terms of computing and communication infrastructure, electricity charges, repair and maintenance expenses of computers, AC and furniture, hardware upgradation expenses, costly real estate occupied by computer labs, software, library, administrative overheads, etc.
- **4.** Universities will save enormous costs and time on centralized term-end examinations.
- 5. If the GER of HEIs in Maharashtra has to be increased from 32.3 % to 50%, open and distance learning (ODL) students' enrollment will have to be increased. This can be achieved at the rate of Rs. 10,000 per student per annum i.e. most economical by offering above mentioned Digital Rights to those students as well.
- 6. Needless to mention that the socio-economic growth in the state due to quantum enhancement of quality of higher education will far outweigh Rs. 3000 crores of annual investment.

5.6 Implementing Authority to be created: Maharashtra Educational Alliance for Technology

The responsibility, accountability and authority for implementation of this program may be given to an autonomous body specially constituted for this purpose. It may be named as "MEAT i.e. Maharashtra Educational Alliance for Technology" modeled on the pattern of NEAT / NETF as proposed in Section 23.3 of NEP 2020.

6. Research and Vocational and Professional Education

6.1 Quality Academic Research

The Sub Committee on Professional, Vocational and Research was led by Dr. G. D. Yadav and Members included Prof. Uday Salunkhe, Dr. B. B. Ahuja, Shri Niranjan Hiranandani, Dr. M. S. Unnikrishnan, Shri Milind Satam and with detailed inputs from Shri Vivek Sawant.

Introduction

Education disseminates known knowledge; research creates new knowledge, and innovation converts knowledge into wealth and social good. All the world-class universities do this linkage seamlessly. Further, mere teaching without research is sterile. Therefore, NEP 2020 has put its sights on a major revolution in its approach to learning systems.

As all HEIs prepare to be Multidisciplinary and Research oriented, changes right from the school levels will be needed in the learning and academic delivery models.

The State should start with key building blocks and implement a well-understood and simple system of research methodology as a basic skill.

Recommendations:

6.1.1 Research Olympiad Mission in Schools:

Recommended that all universities (with active participation of their departments and schools) in Maharashtra may form a consortium to start, grow and sustain a Research Olympiad Mission in cooperation with all 3+4 (i.e. standard 6 to 12) schools in Maharashtra called Consortium for Research Olympiad Missions (C-ROM). Offering ROM

students a fast track or supplementary credits for admission into HEIs will get better talent for research into all HEIs.

6.1.2 Devising and Implementing a Research Credits System:

It is proposed that Research Component Credits be devised in addition to Standard Education Credits that are normally based on contacthours and practical work. All universities in the state together and in consultation with their concerned faculties may define the Research Oriented 3 and 4-year Bachelor's Degree Program Credits & apply them uniformly to include and promote Research as a mode of learning.

6.1.3 Promoting Research Fellowships and Chairs:

The number of FTEs in research in India is very low in India in comparison to the advanced economies. That affects both the quality and quantity of research. New innovative public private partnerships must be created to address this challenge. Chief Minister's Ph.D. Fellowship, Industry Sponsored Post-Doctoral Research Associates, Industry Sponsored Chair Professorships should be created.

6.1.4 All Research Students to have ORCiDiDs.

All students must secure their ORCiDiDs. This ID provides a persistent digital identifier that the user owns and controls, and that distinguishes one researcher from every other. The researchers can connect their ID with their professional information, affiliations, grants, publications, peer review, and more.

6.1.5 Establishment of Translational Research and Innovation Board

All institutes engaged in research may constitute such a board to promote their research and innovation and translate it into a commercial activity so that the journey from ideas to impact or mind to marketplace should be

successfully completed. The Board may consist of institute's head, experts in translational research, representatives of management, faculty, alumni, industry, industry association, etc.

6.1.6 Thrust on Quality and not just Quantity of Research

In order to be a leader in research and innovation and not just a follower, breakthrough research must be promoted. This would require betting on and funding risky but potentially game changing ideas through grand challenge initiatives, where competitive funding should be made available. The State should endeavour to be a leader in cutting edge new technology and reserve funding for such frontier research.

6.1.7 Balancing Research Excellence and Relevance

Research students must solve problems that need to be solved rather than those that can be solved. This means understanding the needs of the industry and society. Incentives should be created for Industry to fund Ph.D. students in academia, who will provide deep scientific solutions to current as well as future challenges of industry. Similarly, funding for creating innovative solutions for the challenging problems of particularly, the resource poor sections, should be provided by forging university partnerships between civil society, industry & government.

6.2 Vocational Education

Vocational Qualifications Alignment with Higher Education

The Sub-Committee on Professional and Vocational Education and Research was led by Dr. G. D. Yadav and Members included Prof. Uday Salunkhe, Dr. B. B. Ahuja, Shri Niranjan Hiranandani, Dr. M. S. Unnikrishnan, Shri Milind Satam and with detailed inputs from Shri Vivek Sawant.

Introduction:

Vocational education has been a neglected area and has traditionally not seen enrollment beyond single digits across the entire education space in India. Germany, Japan and EU in general as well as new world economies such as Singapore, Australia and New Zealand have enabled their masses to work and contribute to society and economy through this route.

India and some states including Maharashtra have been offering Technical Education for students who complete Standard X or Grade ten to take up Polytechnic courses in various engineering technical diploma programs. These have also been pathways for students to progress to UG Engineering degree programs in higher education. These are distinct from Vocational Skills Programs and as such need to be treated as Technical School Board typology programs. These need a special policy focus as they are immensely successful in Maharashtra but don't find a place in NEP 2020 discussions. This needs a separate policy development mandate that the State should take up with the Ministry of Education at the Centre.

NEP 2020, clearly, seeks to bring vocational education and skills oriented qualifications to both Schools as well as Higher Education sectors so as to add value for bridging the existing employability gaps as well as improving effectiveness and openness in terms of student outcomes for society.

Vocationalization is in consonance with choice for learners and improving employability for all.

Recommendations:

6.2.1 Integrate Vocational Education Component in all General Degree Programs: In order to implement NEP 2020 objectives effectively,

all the universities (and autonomous colleges) across Maharashtra may take a policy decision to integrate vocational education component with at least 20% credits in each semester as a mandatory component into their mainstream education for all students of all non-professional Bachelor Degree Programs such as B.A., B.Sc., B.Com., etc. w.e.f. academic year 2022-23.

6.2.2 Mainstream Vocational Education into Higher Education by 2030: By 2030, All universities may attempt to 'mainstream the vocational education' and 'vocationalize the mainstream education' by proper integration of the two. 'Know-What' and 'Do-What' should go hand in hand with 'Know-How and 'Do-How' in all Bachelor's Degree Programs.

6.2.3 Reimagine University Degrees for Development and Empowerment:

University's degree education may, therefore, include knowledge, skills, competencies, character qualities, attitudes, and values critical for survival, development and empowerment of students and society in the 21st century.

- 6.2.4 Professionalize the Vocations: This integration of vocational education into mainstream education will trigger the process of "vocations" becoming "professions" and thereby giving dignity to vocations. The integration strategy will simultaneously solve the problem of unemployment and un-employability of educated youth and that of unjust social hierarchy and social disparity based on vocations.
- 6.2.5 Align with National Skill Development Mission: All the universities may also take a policy decision to align the mandatory vocational component of their mainstream non-professional Bachelor's Degree Programs with the National Skills Qualification Framework (NSQF) in the National Skill Development Mission's

ecosystem developed and governed by Ministry of Skill Development and Entrepreneurship (MSDE), Government of India and recognized by the UGC for B.Voc. Program. The same recognition for NSQF levels for certificate, diploma, advance diploma and degree may be adopted for all non-professional Bachelor's Degree Programs.

- 6.2.6 Benefits of Alignment with National Skills Qualification Framework (NSQF): This decision to align with the national system may lead to many benefits such as:
 - a. All the universities and colleges would at once inherit hundreds of ready to deliver standardized Job Role-Based Courses in agriculture, industry and services sectors. They neither have to design the curricula nor carry out the assessments of the same as these functions are performed by several Sector Skill Councils (SSCs) of MSDE, Government of India.
 - Sponsorship of central and/or state government to colleges for conducting vocational education of SSCs approved Job Role-Based Courses.
 - c. Free and standardized vocational education in the form of Job Role-Based Courses to all students and making them job-ready and hence enhancing their employability.
 - d. Students will get many Job Role-Based Course completion certificates from Government of India. This may give added credibility to those seeking employment. This will also bring all students on an identical national level-playing field and help many of them overcome the disadvantage in job market due to their rural background.
 - e. Students of all non-professional Bachelor's Degree Programs will share the same pool of vocational courses and thereby reduce compartmentalization and fragmentation of higher education.

- f. Reimbursement of training costs to colleges by state/ central government with annually revised rates will make vocational education in colleges sustainable.
- g. Easy credit-portability and student-mobility across colleges or universities.
- h. Employers will enjoy ease in recruitment due to uniform national standard of training, assessment and certification.
- i. Soon after the national system of National Skills Qualifications Framework (NSQF) and National Occupation Standards (NOS) align with the International Standard Classification of Occupations (ISCO) of International Labour Organization (ILO), the students will enjoy greater international employment opportunities and easy mobility in international labour market due to automatic recognition of their prior learning.
- j. This will be a very significant benefit because demographic forecasts have shown that Indians will be the largest Diaspora Community in the world by 2035, as young Indians will be the preferred work force of the world.

7. Inclusion and Equity

Accelerating the Movement towards Ensuring that 'No One is Left Behind'

The Sub-Committee was Chaired by Dr. Pramod Yeole and members included Dr. Abhay Pethe, Dr. Devidas Golhar, Shri Nitin Pujar and Dr. Sukhdeo Thorat. Detailed deliberations in the form of a Report are attached in Annexures with extensive data through Dr. Thorat.

Introduction

The phrases 'inclusion' and 'equity' have been regularly used in most major policy pronouncements in India. Maharashtra has also attempted to address the question with limited or reasonable success.

The trends in enrolment data for all the relevant categories show the right direction but the pace and magnitude and most importantly the quality aspect so very crucial for ultimate outcomes leave much to be desired.

The foundation has been laid and some of the benefits have been accessed by the targeted groups partially, we need to re-strategize, in a nuanced fashion, to become more comprehensive. This requires a deep dive into the empirically evidenced reality, the heterogeneity amongst relevant groups, the relevant geographies, the deeply entrenched cultural and social mores, entry-level preparedness due to schooling and most of all the capacity to implement.

The NEP 2020 points this in a focused manner by identifying the groups such as STs, SCs, OBCs, women, physically challenged persons (and we may add some religious minorities) as socially-economically disadvantaged groups or SEDGs.

It emphasized that 'entry into quality higher education experiences can open up a vast array of possibilities that can lift both individuals as well as communities out of cycles of disadvantage. For this reason, making high-quality higher education opportunities available to all individuals must be among the highest priorities. This Policy envisions ensuring equitable access to quality education to all students, with a special emphasis on SEDGs.' It goes on to add that 'exclusion of SEDGs from the education system are common across school and higher education sectors. Therefore, the approach to equity and inclusion must be common across school and higher education; furthermore, there must be continuity across the stages to ensure sustainable reform.

Thus, the policy initiatives required to meet the goals of equity and inclusion in higher education must be read in conjunction with those for school education.' (Emphasis added).

Recommendations:

- 7.1 Set up a special cell for continuous monitoring and evaluating the performance and attainment of outcomes
- 7.2 Set up a committee which will use empirically evidenced methodology, going into the data based evaluation of what has and hasn't worked for whom and where and suggest new missions/ schemes to take the agenda of inclusion forward.
- 7.3 Set up an Equal Opportunity Office (EOO) at the Apex as well as HEI level.
- 7.4 Access Improvement Initiatives: One is to facilitate migration of students by taking care of facilities (hostels/ tuition etc.); second is to allow for cluster teaching so that groups of colleges in reasonable proximity can come together and allow for such student learning (of course, travel time and cost and time table logistics across colleges will present some prickly issues but can be managed); third is the use of digitalization at a massive scale with creation of subject content in appropriate form and language not to forget the provision of quality connectivity and equipment for access by the students will be issues to be sorted out.

7.5 Other Recommendations:

NTA (National Testing Authority) may not be a suitable format to follow for State SEDG segments. A universal NTA system may affect the access of the students particularly from SEDGs to higher education institutions. At present, the admission to under graduate and master program is done by colleges and universities in the state and by central universities and colleges. It is the colleges and state universities, which decide the criteria for admission. This can be modified without going the NTA way whole-hog. The power of admission with universities and colleges affords liberty to them to take into account the local situation, which facilitates admission. Therefore, we favour freedom of the universities and colleges to give admission in a transparent manner while following the tenets of decentralization and autonomy.

Enabling Bridge Programs, in all HEIs, for students from SEDGs should be devised in order to reduce or eliminate dropouts due to assimilation challenges relating to academic preparatory enablement, linguistic confidence, cultural assimilation and socioeconomic factors.

While we focus on inclusion one has to also recognize that 'gifted' and prodigal talent recognition and nurture is also another aspect of being sensitive to especially talented students. Recognizing and creating a clear space and pathways for such students is also important through scholarships and merit tracks. Every HEI should have a mandate to celebrate, recognize and prepare to support such talent for society.

8. The Languages and Arts

Marathi First, English Bilingual, Local Language Centres, De Novo Arts HEIs

The Sub-Committee was Chaired by Shri Nitin Pujar with members and Invitee Members including Dr. Sukhdeo Thorat, Shri Vijay Kadam, Dr. Ganesh Devy, Dr. Nagnath Kottapalle, Dr. Dilip Dhondge and Dr. Vijay Patil. A Detailed Report of their deliberations is attached to Annexures.

Introduction

The Languages and Arts Sub-Committee for NEP 2020 Implementation was asked to focus, deliberate, plan and recommend a road map for the State of Maharashtra on matters related to language, arts and culture with respect to Higher Education, based on the NEP 2020.

Many issues relating to Language, Arts and Culture have been worked on and deliberated upon from the perspective of what is needed to be devised, developed, invested in, and implemented for the State of Maharashtra to deliver consistent, permanent and abiding value to all stakeholders in this context.

Some of the ideas and plans are long term in nature, some are ambitious and others innovative. The Sub-Committee has taken on board matters of importance for not only the current situation, but also looked into the past policy declarations, reports and decisions of the Central and State Committees and Programs in this area in order to devise initiatives that will gel with the ethos and intent of all concerned.

Recommendations:

8.1 The 3 Language Formula - English/Marathi in Schools

English and Hindi as second language in the school should be introduced right from the 1st standard. The teaching of English from 1st standard till 12th standard, for 12 years will help students to know English and understand the necessary books in

English and prepare them the learning through English in professional courses such as engineering, medical and similar technical areas.

- 1. First is to develop a policy to promote teaching in Marathi in higher education institutions, that is, colleges and universities.
- 2. At the same time, Teaching of English and Hindi as second language should be made compulsory right from 1st standard to 12th standard (or equivalent), and if necessary also during three/four years of college education.
- 3. The policy should be developed to enforce the Self- financing or private schools to resort to teaching in Marathi medium along with compulsory teaching of English as one of the languages from 1st to 12th standard (or equivalent).

8.2 Bilingual Enablement for English-Marathi, Marathi-English

Bilingual learning of English through Marathi has never been formally studied and offered. An effort to gain English as a language for substantive use as a language for 'work', 'business' and 'global' engagement cannot be denied.

We recommend Teaching of English as second language and to make English compulsory right from 1st standard to 12th standard (or equivalent), and if necessary also teaching of English during three/four years of college education. We should follow three language formulas with a bilingual focus on English as an enablement language.

8.3 Marathi First: Asserting Marathi, Promoting Marathi

8.3.1 Marathi First: Maharashtra Jagatik Marathi Prasar Vyaspeeth

The State should create a Global Marathi Promotion Mission which encourages use of Marathi and promotion of Marathi by both public and private universities and institutions. All Maharashtra Universities and HEIs should create a Consortium to execute this vision of celebrating

Marathi and making Marathi easy to learn and enjoy for India as well as the World at large.

The Jagatik Marathi Prasar Vyaspeeth (World Marathi Promotion Platform) is a proposed key body that may be formed by a State Level Consortium of Universities in Maharashtra to promote Marathi at all levels and across all geographies.

8.3.2 Marathi Higher Education: Text Books, Resource Material Development

In order to improve the quality of teaching material there is an urgent need to prepare Text Books and Comprehensive Resource Material in all subjects in Marathi - humanities (languages), sciences, engineering, medical education, management education, commerce and other subjects.

8.3.3 Massive Continuous Digital Marathi Translations Mission

The State has already included the mandate of teaching all Higher Education subjects in Marathi in the MPUA 2016. Due key challenges has been the low availability of translated texts, reference books and recommended reading material in many subjects including science and technical.

The *Massive Continuous Digital Marathi Translations Mission* seeks to solve for this need through using technology to be able to accelerate translations in a fraction of the time it may take for the achieving this goal, quickly. This capacity needs to be built through language technology based on Digital &AI based capabilities that are emerging across the world, and India.

The Technological Innovation available to us is to enable us to take this project online and through the use of technology to do massive translation work – distribute and create a collaborative platform that will make accurate well-reviewed translations available digitally to all teachers, learners and lovers of languages. Partnering NGOs who work in space such as Marathi Vignyan Parishad and even GOM Marathi Departments will be able to work more closely with all projects in this space if we use this platform approach in making this Mission successful.

8.4 Sanskrit: A classical and special language, best as an added language

We need to draw a distinction between Sanskrit as a language, and, Sanskrit as a knowledge system (or the knowledge contained in Sanskrit language). Sanskrit as a language should be taught like any other language, the knowledge (written in Sanskrit language) in sciences and social science may be taught in each of the discipline in the respective department.

Further, the teaching of religious philosophy contained in Sanskrit should not be mainstreamed under the Education policy. If this happens, it would mean teaching of one religion in educational Institutions, which is specifically prohibited by Constitution under article 28 (1). Teaching of one religion under the protection of teaching of language would be unconstitutional.

Sanskrit should be taught as one of the optional languages, like any other classical language, such as Pali, Prakrit and other classical regional languages.

8.5 The Public University Centers for Other Languages of Maharashtra

Maharashtra Public Universities should be Lead Language Centers for various languages and house State Language Initiatives and a unique Jan Kala Initiative:

University of Mumbai	Sindhi/Guajarati Studies Centre, State Translation Studies Centre	
SPPU Pune	Nomadic Tribes (Bhatke Samaj) Centre for Languages, State Translation Studies Centre	
RTM Nagpur University	Centre for Other Scheduled languages (Other than Hindi/Marathi), State Translation Studies Centre	
SRTM University Nanded	State Translation Studies Centre	
Gadhchiroli/ Chandrapur HEIs	Telugu	
PAH Solapur University	Kannada	
KBCNMU Jalgaon	Airani, Bhili, Khandeshi and Korku Studies	
Pune - Bhandarkar Institute	Pali&Prakrit Studies and Literature	
Pune - Deccan College	Sanskrit & Pali and Other Classical languages, Culture & Allied studies	
Sangli (Under Shivaji University)	Annabhau Sathe Maharashtra Jankala Centre for Traditional Performing Arts under Shivaji University	

8.6 Establish Creative, Performing Arts & Content MERU Institutions of Excellence

Establishing State Level Maharashtra HE Institutes/Universities of Creative & Performing Arts and Content is needed to bring forth the potential for excellence in Maharashtra's Art and Culture Capability.

The Establishment of Four MERU level Institutions at Mumbai/Raigad, Nagpur, Sangli/Kolhapur, Solapur or Aurangabad In this space is recommended for wide and accessible reach and representation of the regional diversity in Maharashtra.

These can be de-novo institutions that will bring literary as well as cultural value to the state and offer employment pathways to millions in the post digital society that is emerging.

9. Finance

Credible Commitment by the Government and Facilitation through Enabling Policy Reforms and Capacity Building

The Sub Committee was Chaired by Dr. Abhay Pethe and Members included Shri Nitin Pujar, CA Ajit Joshi and CA Haren Sanghvi. Detailed Notes on all Finance matters are attached in Annexures.

Introduction

The change in the macroeconomic management ethos ushered in India in the last three decades is here to stay. This has affected all sectors and more particularly social sectors including the quasi-public good like the higher education.

The mood is firmly in favour of facilitation rather than provisioning or direct production by the government. Yet, in a minimal sense the government must engage with the HE sector and fulfill its obligations of allocating and efficiently utilizing adequate resources. The role of the government thus, has not shrunk but has significantly changed.

Going forward, greater emphasis will have to be on creating policy framework and rules that enable the private sector to optimally play the desired role in an environment of minimum transactions costs and incentive compatibility.

The issue confronting the HE sector is of putting in place sustainable financing models for the ambitious and transformational goals in all facets and components of HE as laid out by NEP.

The HEIs on their part will have to convert themselves from passive grant accepting entities to proactively raising funds in a conducive atmosphere.

This will of course come with added transparency and accountability where HEIs will have to deliver measurable outcomes most important of which is to provide quality education with students firmly at the centre.

Recommendations:

- 9.1 **White Paper on HE Sector**: Create and Put out a white paper on HE sector of Maharashtra.
- 9.2 **Commit Long Term Budget Provisions for HE**: Make a self-binding commitment and provision of the requisite budgetary resources in a time bound manner.
- 9.3 **Set up a State level Higher Education Finance Mission/** Board.
- 9.4 Ring Fence HEIs' Generated Funds and Endowments: The funds raised through various changes in approach to costs and funding innovations and monetizing strategies by the State and HEIs must be ring fenced autonomously by HEIs but with the proviso that this must be done with utmost transparency and accountability and for publicly declared educational purposes. Also work on enabling HEIs to invest surpluses and funds for better rate of return rather than low yield avenues as per current codes and norms alone.
- 9.5 **Restructure and Reform FRA:** Enabling provisions with respect to new approaches regarding rationalization of fees and strengthening, restructuring and reforming the FRA and provision of additional funding as an incentive for encouraging the best practice should be carried out in a transparent manner. Using differential fee structures through application of 'means tests', displaying total course costs transparently, etc. should be worked out.
- 9.6 **PPP Study for Education Sector:** A quick study needs to be commissioned to tailor all PPP arrangements in the context of Education Sector that will consider specificities as well as import learning around PPPs in other sectors.
- 9.7 **High Level Committee for Finance Planning:** Set up a committee involving high level officials Finance, Planning and Higher

Education departments of the Government of Maharashtra along with some of external experts (Economists/ Finance Experts/ CAs) which would be mandated to work out the financial details enabling roll out of the recommendation of this committee.

Priority Classification of Changes / Recommendations

Recommendations of various Sub-committees have been taken up and classified as per their Urgency, Impact, Ease of Implementation, Investment and Funding implications in terms of quantum of investments as well as Priority for Execution.

Various Sub-committees felt there was a lack of current data availability thus requests for White Papers, detailed preparatory plans and comprehensive roadmaps will need to be prioritized as immediate and urgent starting points for the State to work on.

All the members concurred on the need for us to commit to time based targets for each recommendation to be executed. These may be in alignment with a one year - 2022, two year - 2023, three year - 2024 or by year - 2025, 2030, 2035 through to 2047. The idea is to be able to take the education ecosystem towards milestone achievements based on a firm assessment of all aspects such as investments, policy integration and enablement, transition challenges, resource mobilization and ground level activation but with a time based goal. What one needs to achieve when is the most appropriate way to achieve execution of the recommendations of the Task Force.

Some recommendations are uplifting and celebratory others are corrective in nature. Some involve changes and others exhort immediate decisions and assertions to the Central Ministry of Education.

As with all vision projects these are mere starting points and will always lead to more ideas and achievements.

Immediate/ Minimum Resource Required

- 1. Perspective Plan and roadmap for transition from current 3 year Programs to 3/4 Year Program Teaching is urgently required. A state level plan may be devised as a model plan for all HEIs to adapt and implement.
- 2. Offering Automatic Invitation based University status to Large Groups of Institutions of over 50 years excellence in operations is proposed. This will enable easy transitions of affiliating colleges away from Public Universities as well as create Autonomous University-level HEIs as

envisaged by the NEP 2020. This may be done through appropriate and simple procedures. This should be taken up as a way to celebrate 75 years of India's Independence in 2022 as a re-dedication to the Nation and Maharashtra.

- **3. Post Doctoral Programs** need to be started as they are not available today in all Universities. This will offer a push to Research as a culture and motivate both teachers as well as students.
- 4. Maharashtra State Responsible Research and Innovation Council to be established with eminent Research Leaders and Technocrats alongwith committed State Leadership also on the Council will enable empowerment for the envisioned Research Intensive Focus across the Higher Education Space in the State.
- 5. HRDC needs to be realigned with Multidisciplinary approach through redesign of its scope. Alternatively, MSFDA may be entrusted with the role of nodal agency with adequate financial support to design, develop and launch the online or blended credit courses for teachers of HEIs.
- 6. A high-powered committee assisted by an external team/cell/ agency (or more than one such) for different geographies and typologies, should be constituted to assist the HEIs in smooth transformation to the proposed NEP-based educational structure.
- 7. Enable **Digital Adjunct Faculty** from Foreign Universities or HEIs to be on boarded through an open and simple process. Digital Online Interactive technology has made this possible and may make this easier than physically seeking adjunct faculty positions in India's HEIs.
- **8.** Research & Innovation Boards to be created or enhanced at all HEIs for internal and external focus and engagement levels to be maintained at high levels.
- **9.** Set up an **Equal Opportunity Office** each at all HEIs for keeping the inclusivity commitments on course.

- **10. More Funds to be provided for full cost freeships of SEDGs**, mere fee waivers are not enough with costs of staying in educational mode is increasing leading to drop outs.
- 11. NTA (National Testing Agency) common test not to be applied to SEDGs for State to be able to articulate seats with due local assessments. NTA may cause an unintended barrier to entry for SEDGs especially in rural and low access areas, bringing down already low GERs in such areas and districts.
- 12. Marathi First: Use Al Translation technology for Massive Marathi Translations Mission. Translations are the key to making higher education accessible at UG level. Manual translation projects are always time consuming and talent starved. Using Al based platform technology one may be able to speed up such projects and bring their cost down. This technology is now proven and available. This needs to be taken up immediately.
- **13.** A White paper on the Finances of Universities is needed for Budgets, Funds planning and roll out for next fifteen years 2035 and onwards to 2047.
- 14. Self Binding Commitment by the State on filling up vacancies, is the key to capacity building. As the GER challenge comes up and expansion of HEIs is needed, let us not forget that it is 'expansion' that we will be working towards. We will be needing more and more Teaching talent to even keep up with current GER levels.
- 15. PPP in Higher Education needs a detailed study for maximum value to the State, this should be done for devising a suitable policy to work with more effective PPP models in the State. It would be timely and appropriate to set up a Committee to devise a White Paper on this matter. This will have to focus on enabling HEIs to be able to align impact goals for all stakeholders in an efficient and effective manner.
- **16.** Capacity building for finance related operations is needed for leadership at all HEIs. A Suitable Empowered Committee needs to be

formed for planning the training, enabling and focusing of all prospective leaders of HEIs on finance matters and systems.

- 17. Enabling provisions towards rationalization of fees and strengthening, restructuring and reforming the FRA policies need to be studied, revisited and implemented for both Private and Public HEIs.
- 18. India and some states including Maharashtra have been offering Technical Education for students who complete Standard X or Grade ten to take up Polytechnic courses in various engineering technical diploma programs. These have also been pathways for students to progress to UG Engineering degree programs in higher education. These are distinct from Vocational Skills Programs and as such need to be treated as Technical School Board typology programs. These need a special policy focus as they are immensely successful in Maharashtra but don't find a place in NEP 2020 discussions. This needs a separate policy development mandate that the State should take up with the Ministry of Education at the Centre.

Medium Term/ Some Resource Commitment Needed

- 1. Prepare a Detailed Plan and Roadmap for Re-Classification of all HEIs into New Research/Teaching/Autonomous Colleges with due transition resources that may be needed to implement the NEP 2020 vision.
- 2. Legislative Framework at State level needed for Foreign Universities to Operate in a win win mode with HEIs in Maharashtra will be needed to either be included in the State Act or a separate Act may be indicated.
- 3. For Regulatory Compliance to be quicker and up to date **Maharashtra State Council for Development of Higher Education** needs to be established immediately.
- 4. Fixed Tenures of various governing authorities at University level mean that there is lack of continuity for effective transformation to occur. Need to work with the Rajya Sabha model of continuity for sustained and continuous governance focus.

- 5. **Dual Degree Mode of Operation and Collaboration systems need to be defined in detail** with due processes and enablements in statutes and rules so that Dual Degrees may be immediately launched by HEIs.
- 6. **Academic Bank of Credits System** to be devised and detailed urgently.
- 7. **Choice Based Credit Systems** to be implemented across all HEIs.
- 8. **Teacher Tenure Track Reform** Enablement needed.
- 9. **Extensive teaching in Marathi/Bilingually** for maximum inclusion as per MPUA 2016 mandate should be enabled and encouraged across all HEIs.
- 10. Maharashtra Deans Consultative Committee for Development of Curriculum Framework to be formed.
- 11. **State level committee of teacher education experts** representing public and private universities in the state may be expressly constituted for creating a common curriculum and set of guidelines for Teacher Education Institutions.
- 12. Use Constructivist pedagogy rather than Instructivist Pedagogyto create a Learning System rather than a Teaching system Mentor-Mentee Mission for Affiliated Colleges to guided by other HEIs to High Quality Institutions/Lead College etc. Needs Program Formalisation at State Level.
- 13. **E Board of Studies Forum of all BOS Chairpersons** of various Universities to be formed.
- 14. Align HEIs pathway for **General Degree courses with Vocational Degree courses as per NCVF** for students to acquire dual degrees or credits. Also consider the case for all HEIs to offer Skills and Vocational Programs for credits so that Industry as well as students are ready for work at graduation levels.

Long Term/ Vision Projects with Major Funds and Efforts needed

- For true enablement of Autonomy & Excellence in the Education space in Maharashtra, an Empowered Group of Ministers with a focus on all education matters from Schools to Skills Development as well as Higher and Technical Education may be formed. This is needed for all education entities and departments at the state level to be able to synchronise investments and resources for the NEP 2020 approach to be successful from ECCE to HEIs.
- 2. **Multi Disciplinary HEIs Plan at State Level** needs to be made for MERU Implementation and Transition as envisioned by the NEP 2020 by 2035
- 3. **Jurisdiction restrictions within state may be relooked** at as this affects proposed de-affiliation and autonomous and clustering initiatives for transition to 100% Degree granting HEIs as ensiaged by NEP 2020.
- 4. Flexible Framework for Personlised Learning by Students should be designed for wholistic development of student. Synthesised Degree Concept to be introduced. This will need a paradigm shift in the contract between the student and all other stakeholders.
- 5. **Centres for Excellence in Teaching & Learning** to be established
- 6. The Directorate of Higher Education may consider getting a central portal developed for hosting an evidence-based Smart Internal Quality Assessment and Assurance System (SIQAAS) for all TEIs in the state.
- 7. Universal Free Digital Rights Approach to all HEI learning and management with Student Centric Services: Free Digital Access and Empowerment can be as low as just Rs 10,000.00 per annum per student. This is just a 12-18 % increase in current costs er student per annum. This is estimated at about Rs 3000.00 crore per annum for three million or 30 lakh students.
- 8. **Create MEAT Maharashtra Education Alliance for Technology** to align with NETF at National level and implement Digital Policy across HEIs.

Extensive use of Digital Technology needed to bring all HEIs under a single enabled operational system, too.

- 9. Language Research to be pushed through various Centres of Languages in all Universities to include regional languages also. This is to nurture various languages as a core cultural commitment and not merely anout use of language as a tool for communication.
- 10. Antar Bharati Sane Guruji Centre to be empowered to do research in Linking Indian Languages to Marathi and *vice versa* through translations and allied research. This will enhance the syncretic cultural bonds across India in an effective way.
- 11. **Promote Marathi through a Global Marathi State platform** entity that will teach, promote culture of Maharashtra along with Marathi. This will formalise, strengthen and open up Marathi as a cultural gateway for us as well as for new people across the world.
- 12. **Establish 4 HEI level Performing Arts Institutions** in 4 regions to promote content across digital, theatre, films and all communication contexts. As the world digitises creating content will be the new economy value add service needed by the world at large. It will emerge as a new multidisciplinary service; it needs its space to evolve as a mainstream economic activity.
- 13. Start a Jan Kala Kendra at Sangli to promote traditional art forms and formats under Shivaji University. This is a cultural project of immense value for all.

 End	of	recommendations	

List of Members of the Task Force

Sr.No.	Member	Designation
1	Dr. Raghunath Mashelkar, ex Director General, CSIR, New Delhi	Chairman
2	Prof. Sukhdeo Thorat, ex Chairman, University Grants Commission, New Delhi	Member
3	Dr. Suhas Pednekar, Vice Chancellor, Mumbai University, Mumbai	Mumbai
4	Dr. Sahshikala Wanjari, Vice Chancellor, SNDT Women's University, Mumbai	Member
5	Dr. Pramod Yeole, Vice Chancellor, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	Member
6	Dr. Rajan Welukar, ex Vice Chancellor, Mumbai University, Mumbai	Member
7	Dr. Vilas Sapkal, ex Vice Chancellor, Sant Gadge baba Amravati University, Amravati	Member
8	Prof. G. D. Yadav, ex Vice Chancellor, Institute of Chemical Technology, Mumbai	Member
9	Dr. Vijay Patil, Chancellor, D.Y. Patil University, Mumbai	Member
10	Shri Nitin Pujar, International Consultant, Mumbai	Member
11	Dr. Abhay Wagh, Director, Technical Education, MS, Mumbai	Member Secretary
12	Dr. Niranjan Hiranandani, ProVost, Hyderabad Sind National Collegiate University, Mumbai	Member
13	Dr. Bharatkumar Ahuja, Director, College of Engineering, Pune	Member

Sr.No.	Member	Designation
14	Dr. Devidas Golhar, Principal, Marathwada College of Commerce, Pune	Member
15	Shri Milind Satam, Member, Senate, Mumbai University, Mumbai	Member
16	Dr. Ajit Joshi, Educationist, Parle Tilak Vidyalaya Association's Institute of Management, Mumbai	Member
17	Shri Vijay Kadam, Founder Trustee, Shiv Vidya Prabodhini	Member
18	Dr. Dhanraj Mane, Director, Higher Education, MS, Pune	Member
19	Dr. Anil Patil, Chairman, Rayat Shikshan Sanstha, Satara	Invitee Member
20	Prof. Abhay Pethe, Economist and advisor on Policy matters, Mumbai	Invitee Member

List of Special Invitees on various Sub-committees

The following Experts from Professional field/Academics/Corporate/Civil Society

were invited to work on various subgroups

Sr.No.	Subgroup	Member	Designation
1	Digital Education	Shri Vivek Sawant, Chief Mentor, Maharashtra Knowledge Corporation Ltd. Pune	Invitee Member
2		Shri Venguswamy Ramaswamy, Head, TCS iON, Mumbai	Invitee Member
3		Shri R. V. Balasubramaniam Iyer, Vice President, Reliance Jio Infocomm Limited	Invitee Member
4		Dr. Deepak Shikarpur, IT Consultant & Writer, Pune	Invitee Member
5		Rahul S. Belwalkar, MD & CEO, Director, SecUR Credentials	Invitee Member
6	Professional & Vocational Education & Research	Dr. Uday Salunkhe, Director, Welingkar Institute of Management Development & Research, Mumbai	Invitee Member
7		Shri M. S. Unnikrishnan, CEO, IITB Monash Research Academy, Mumbai	Invitee Member
8	Language & Arts	Dr. Ganesh Devy, Literary critic & Former professor, Marathi	Invitee Member
9		Dr. Nagnath Kottapale, ex Vice Chancellor, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	Invitee Member
10		Dr. Dilip Dhondge, Former Professor	Invitee Member
11	Training of Teachers	Ms. Suchitra Surve, Director, Growth Centre (I) Pvt. Ltd., Mumbai	Invitee Member

Sr.No.	Subgroup	Member	Designation
12	Finance	Shri Haren Sanghvi, CA, Finance Professional, Mumbai	Invitee Member
13	Curriculum	Dr. Suresh Ukarande, Principal, K. J. Somaiya Institute of Engineering and Information Technology, Sion, Mumbai	Invitee Member
14		Dr. Mrudul Nile, Professor Dept of Civics & Politics, Mumbai University	Invitee Member
15		Dr. Shefali Pandya, Professor, Department of Education, Mumbai University, Mumbai	Invitee Member

Detailed reports of all Sub –Committees are available in separate Annexure document