

**Sought for consultative views on the final draft of State
Higher Education Policy 2016 from any individual/ firm/
intellectual bodies/ organization/ Association etc.
which may please be sent to vcfmuniversity@gmail.com
latest by 15th December'2016.**

HIGHER EDUCATION POLICY, 2016 GOVERNMENT OF ODISHA

Prepared by

Prof. Siba Prasad Adhikary

**[Chairman of State Level Committee, Higher Education policy]
Vice-Chancellor, Fakir Mohan University, Balasore-756020**

(Finalised by draft committee on 30th July 2016)

Preface

A State level committee was constituted for formulation of New Education Policy on 28-08-2015. The committee consisted of Prof. S.P. Adhikary, Vice Chancellor of Fakir Mohan University as Chairman, Joint Secretary, Higher Education as Member-Secretary and six other members comprising (1) Prof. Ranjan Kumar Bal, Chairman, P.G. Council, Utkal University, (2) Prof. Omkar Nath Mohanty, Former Vice-Chancellor, BPUT, (3) Prof. Biswajeet Pattanayak, Director, Asian School of Business Management, Bhubaneswar, (4) Registrar, BPUT, Rourkella, (5) Director, Higher Education, Odisha, and (6) Director, Vocational Education, Odisha.

The committee met on 07-09-2015 and on 19-02-2016 in the Higher Education Department, Govt. of Odisha and prepared the draft education policy for the state keeping in view of the salient features of the National Education Policy, 2016 and the Task Force Report on Higher Education, 2010 with recommendation in three areas, namely restoration, expansion and consolidation. The draft policy was posted in the website of Higher Education (www.dheorissa.gov.in) in April 2016 inviting comments/suggestions from the stake holders online.

On 8th May 2016 a State Level consultative workshop on the Higher Education Policy was held in the Directorate of Test Book Bureau. Chairman OSHEC-cum-Hon'ble Minister of Higher Education, Dr. Pradeep Kumar Panigrahy presided the meeting and appealed for a collective wisdom to formulate a policy for Higher education in the state to be catalyst for development with vision to ensure equity, access, quality and excellence. Forty four invitees comprised of academicians, academic administrators and officers of the Higher Education Department detailed below participated in the workshop .

1. Dr. Pradeep Kumar Panigrahy, Hon'ble Minister of Higher Education
2. Sri G.V.V Sarma, Project Director-cum-Principal Secretary to Govt., Higher Edu.
3. Dr. S.B. Padhy, Special Secretary to Govt., Dept. Higher Education
4. Sri Prasanta Kumar Das, Addl. Secretary to Govt. Dept. Higher Education
5. Prof. N. R. Patnaik, Director, Higher Education
6. Dr. Rosnara Begum, Director, Vocational Education
7. Dr. Gitika Patnaik, Director, Text Book Bureau
8. Dr. L.K. Tripathy, Regional Director Higher Education, Berhampur
9. Dr. Basudev Chattoi, Chairman, CHSE Odisha
10. Dr. Mihir Kumar Das, OIC, PTE, Higher Education
11. Dr. Niranjana Mishra, Coordinator SQAC, Higher Education
12. Dr. Rashmi Mishra, Program Coordinator, AISHE
13. Dr. Aamiya Kumar Mohanty, Administrative officer, OSHEC
14. Smt. Dibarani Dora, FA, OSHEC
15. Prof. Ashok Kumar Das, Vice-Chancellor, Utkal University & Member OSHEC
16. Prof. Deepak Kumar Behera, Vice-Chancellor, Berhampur Univ. & Member OSHEC
17. Prof. Siba Prasad Adhikary, Vice-Chancellor, Fakir Mohan University
18. Prof. Prafulla Kumar Mishra, Vice-Chancellor, North Orissa University
19. Prof. Gangadhar Panda, Vice-Chancellor, Jagannath Sanskrit University
20. Prof. Padmaja Mishra, Vice-Chancellor, Rama Devi Womens' University

21. Prof. Manmath Nath Padhi, Vice-Chancellor, Khallikote Cluster University
22. Prof. Amulya Panda, Former Principal, Ravenshaw College
23. Prof. Bishnu Charan Choudhuri, Former Professor of Pol. Sci., Berhampur University
24. Prof. Sudhakar Panda, Former Prof. of Economics, Utkal Univ & Member OSHEC
25. Dr. Muktikanta Mishra, President, Centurian University
26. Dr. Satyakam Mishra, Former Director, Higher education, Govt. Of Odisha
27. Prof. T.M. Mohapatra, Pro VC, KIIT University
28. Dr. Sudhakar Panda, Director, Institute of Physics & Member OSHEC
29. Dr. Srijit Mishra, Director, Nabakrushna Choudhuri Institute for Development Studies
30. Prof. Biswajit Patnaik, Director, ASIAN School of Business Management
31. Prof. Ranjan Kumar Bal, Chairman, P.G. Council, Utkal University
32. Dr. Susmit Pani, Director, DDCE, Utkal University
33. Dr. Jayanta Kumar Sharma, Registrar, Odisha State Open University
34. Prof. Kishore K. Basa, Professor of Anthropology, Utkal University
35. Prof. Sanjat Kumar Sahu, Professor of Env. Science, Sambalpur University
36. Dr. Md. Nawaj Hussain, Principal, B.J.B. Autonomous College
37. Dr. Kishore Chandra Samal, Former Professor, NKCDs
38. Dr. Sanjukta Mohapatra, Principal, S.B. Womens' college, Cuttak
39. Dr. S.C. Patra, Principal, Govt. Womens' college, Baripada
40. Dr. Harekrushna Nayak, Principal, BJB Junior College, Bhubaneswar
41. Dr. G.C. Pradhan, Principal, BJB Junior College, Bhubaneswar
42. Dr. Kambupani Sahu, Principal, Berhampur City college, Berhampur
43. Dr. Swapna Pani, Principal, Kamala Nehru Womens' college, Bhubaneswar
44. Dr. A.K. Mishra, Rayagada (Autonomous) College, Rayagada

All the participants gave their suggestions on different aspects of the draft Higher Education policy. The suggestions received online were also discussed. In order to have an exhaustive discussion on different issues confronting Higher Education, the participants were divided into five groups and entrusted to suggest recommendations on specific assigned issues as follows:

Recommendation on the HE Policy	Academicians involved in the group
Group-A <ol style="list-style-type: none"> 1. Governance Reforms 2. Ranking and Accreditation 3. Regulation 4. Restructuring of Public Universities 5. Self financing Institutions 	Prof. S.P. Adhikary, VC, FM University Prof. P.K. Mishra, VC, N Orissa University Prof. M. Padhi, VC, Khallikote University Dr. S. Panda, Director, Institute of Physics Prof. R.K. Bal, Chairman, PGC, Utkal Univ. Prof. T.M. Mohapatra, Pro VC, KIIT Dr. J.K. Sharma, Registrar, State Open Univ
Group-B <ol style="list-style-type: none"> 1. Quality and Excellence 2. Online courses 3. Skill Development 4. Technology enabled learning 5. Research and Innovation 6. Linkage with Central Institutions 	Prof. A.K. Das, VC, Utkal University Prof. B.C. Choudhuri, Berhampur University Prof. S. Pani, Director, DDCE, Utkal Univ. Prof. K. K. Basa, Utkal University Dr. Rashmi Mishra, Coordinator, AISHE

<p>Group-C</p> <ol style="list-style-type: none"> 1. Outreach Programmes 2. Inclusiveness 3. Cultural value through language 4. Internationalization 	<p>Prof. G. Panda, VC, Jagannath Sanskrit Univ Dr. M.K. Mishra, President, Centurian Univ. Dr. Md. N. Hussain, Principal, BJB Auto.Coll Dr. L.K. Tripathy, RDE, Berhampur Dr. G.C. Pradhan, BJB Jr. College</p>
<p>Group-D</p> <ol style="list-style-type: none"> 1. Teachers 2. Student Support and progression 3. Reform measures 4. New Knowledge and Best practices 	<p>Prof. D.K. Behera, VC, Berhampur Univ. Prof. A.K. Panda, Ex. Principal, Ravenshaw Dr. S. Pani, Principal, Kamala Nehru Coll. Dr. K. Sahu, Principal, Berhampur City Coll. Dr. H. Nayak, BJB Junior College Dr. S.C. Patra, Principal, Baripada W. Coll. Dr. S. Mohapatra, Principal, Sailabala W.Coll</p>
<p>Group-E</p> <ol style="list-style-type: none"> 1. Financing Higher Education 2. Relating to Society at a large 	<p>Dr. Srijit Mishra, Director, NKCDs Prof. P. Mishra, VC, R.D.Womens' University Dr. K. Samal, Ex. Professor, NKCDs Principal, Womens' College Keonjhar. Dr. A.K. Mishra, Rayagada (Auto) College</p>

The members of the above five groups had detailed discussion and prepared recommendation for inclusion in the draft Education policy. These recommendations were placed in the website of the Higher Education Dept., Govt. of Odisha inviting further suggestions from the stake holders. This was also posted in the website of different Universities of the state inviting suggestions from the students and faculties.

A consultative workshop was again held in the Directorate of the Text Book Bureau, Bhubaneswar on 07-06-2016 in which office bearers of different Teachers Associations and employees serving Higher Education sector participated. Prof. Ashok Kumar Das, Vice-Chancellor, Utkal University presided over the workshop. An interactive meeting with students on the State Higher Education policy was also held on 24-06-2016 in which office bearers of various student organisations and Research scholars participated. Suggestions received from students and teachers of different Universities and colleges through their Head of the Institution were also discussed in these meetings. After thread bare discussion with the teachers and students those suggestions emerged through consensus were incorporated. The draft was placed in the Committee on 30th July 2016 and relevant suggestions in the National Education Policy 2016 for the state were included.

Basing on the critical analysis along with suggestions through consultative process detailed above, the Higher Education Policy of the state is finalised for submission to the Government for further action.

Prof. Siba Prasad Adhikary
Chairman of State Level Committee
for Higher Education policy, Odisha
Date: 1st August 2016

HIGHER EDUCATION POLICY, 2016

GOVERNMENT OF ODISHA

1. Introduction

- 1.1. In an era of globalization and knowledge economy, higher education is the key to overall progress of a state. Whatever be the arguments, education has proved to be the engine of social, economic, cultural transformation and there is no alternate to substitute to it. Hence improving the quality and inclusive growth of education to reach its goals is one of the priorities of the Government. Higher education is presently facing many problems of which the major one is lack of quality teaching-learning and research. Such problem is due to multiple factors which include lack of sufficient qualified and experienced teachers; inadequate faculty enrichment programs; out dated curriculum and traditional pedagogy; inadequate technology integration and support facilities. The present world needs skills in youth which Higher education can provide through the Universities making them empowered and competitive. The only concern is the quality.
- 1.2. Effectiveness of empowering the youth is dependent upon its Professors and teachers at all levels with effective class room teaching strategies, adoption of modern technologies in teaching and research, implementation of up-to-date curriculum par with global standard etc. This also depends on the commitment of teaching community at all levels, their competence and time-to-time training to update their knowledge base and expertise to become effective teachers. Quality of a teacher has a profound impact on the learning abilities of disciples. India has a legacy of great teachers from time immemorial. History tells the contribution of “Chanakya”, the teacher of Taxila from about 300 BC with the magnificent “Arthasastra” to that of Barahamihira, Bhaskar, Lilabati and many others in Mathematics, Astronomy and Ayurveda until late 1000 AD. The teacher centric gurukul system had showed the path in ancient times with clear description in epics like the Ramayan and the Mahabharat which was undreamt of in many countries which boost of providing quality education. We could not keep the pace due to foreign invasions and the colonial masters who stifled free thinking and creativity. The leaders of Indian freedom movement realised the fundamental role of education and stressed its unique significance for national development.

Mahatma Gandhi formulated the scheme of basic education harmonizing intellectual and manual work with focus on education as directly relevant to the life of the people. In the post-independence period the Government of India and the states have constituted commissions to review educational reconstruction. The University Education Commission (1948) constituted by Government of India, soon after independence under the chairmanship of Dr. S. Radhakrishnan stated that “if India is to confront the confusion of the time, she must turn for the guidance, not to those who are listed in the more exigencies of the passing hour, but to her men of letters, and men of science, to her poets and artists, to her discoverers and inventors. These intellectual pioneers of civilization are to be found and trained in the Universities, which are the sanctuaries of the inner life of the nation”.

- 1.3. During the third Five Year Plan the Government appointed the Education Commission (1964-66) to advise on “the national pattern of education and on the general principles and policies for development of education at all stages and in all aspects”. Dr. D.S. Kothari, the Chairman of the Committee noted that “the function of the University is not only to preserve, disseminate and advance knowledge, but also to furnish intellectual leadership and moral tone to the society. No less important is the role of Universities in promoting National integration and a Common culture and in bringing about social transformation that is desired. Universities have also to provide trained personnel to advance the Country’s prosperity by making full use of modern knowledge. The commission had set forth a three dimensional role for Universities and colleges, namely, teaching, research and extension.
- 1.4. Subsequently the Yashpal Committee constituted by the Government of India to advise on Renovation and Rejuvenation of Higher Education felt that “ a University is a place where new ideas germinate strike roots and grow tall and sturdy. It is a unique space, which covers the entire universe of knowledge. It is a place where creative minds converge, interact with each other and construct visions of new realities. Established notions of truth are challenged in the pursuit of knowledge”. In 2006 the National Knowledge Commission recommended to the Government for reforms in Higher education based on quantity, quality, equity and access relating to Universities and Undergraduate colleges.
- 1.5. Late Dr. A.P.J. Abdul Kalam in his book “ India 2020: A Vision for the New Millennium” wrote that “For transforming the nation into a developed county, five areas in combination have been identified based on India’s core competence, natural resources and talented manpower for integrated action to double the

growth rate of GDP and realise the Vision of a Developed India. And the five areas are (i) Agriculture and food processing, (ii) Education and Healthcare, (iii) Information and Communication Technology, (iv) Reliable and Quality electric power, Surface transport, Air transport and Infrastructure for all parts of the country, and (v) Self reliance in critical technologies. These five areas are closely inter-related and if progressed in a coordinated way, will lead to food, economic and national security”.

- 1.6. The 12th Plan Document Places a significant emphasis on excellence along with expansion and equity. With this view, in the year 2015 Govt. of India initiated a consultative process for formulation of a new education policy for the Nation with an aim to implement it from the academic year 2016-17.
- 1.7. Government of Odisha constituted a Taskforce of Higher education in 2009 which gave a comprehensive report along with a prospective plan of action for the period from 2010 to 2022. The key recommendations were categorised under three different areas, namely, restoration, expansion and consolidation.
- 1.8. Govt. of Odisha constituted a committee on 03.09.2015 to prepare a Education Policy for Higher Education in the state.
- 1.9. Taking into account of the taskforce report on Higher Education 2010, the guidelines of new education policy of Govt. of India and consultation with educationists and stake holders, a draft education policy for the state is prepared. Many of the recommendations of the Taskforce on Higher Education, 2010 (Annexure-I) were re-recommended for implementation. However, due to the changing scenario and resources, the Committee felt the necessity of omission of certain recommendations of the Task force, 2010 as detailed in Annexure-II.
- 1.10. The new Education policy of Govt. of India places a significant emphasis on quality and excellence along with Inclusiveness and equity. These days higher education is becoming increasingly international and is getting more and more affected by tensions of competition for excellence and global ranking. As a result promotion of quality is taking centre stage while formulating Higher education policies globally. Further, economy of the state is growing at a fast pace. Rapid industrialization would require skilled work force. Given the socio-economic scenario, the state need a robust higher education system that can deliver multiple imperatives.

2. Vision and Mission of the State Higher Education Policy, 2016:

2.1. Vision

The Odisha Higher Education policy, 2016 envisions a system of HE in the state ensuring quality education producing manpower equipped with knowledge and skill that can empower the youth to contribute to the knowledge-based economy of the 21st century and all round development of the society.

2.2. Mission

- Achieving quality and academic reforms
- Teacher centric to learner centric paradigm of Higher education
- Intensive use of Information and Communication Technology
- Access, Equity and Inclusiveness
- Skill based and community-linked education

To achieve the envisioned goal of the state within a decade, transformational and innovative intervention is required across the following levels of the higher education system: I. Governance, II. Quality and excellence, III. Teacher and Student support, IV. Equity and V. Funding.

3. Governance : One of the critical Hallmarks of quality and excellence would be dependent on the quality and excellence of Governance. Governance sets the translation of policy into implementation at grass roots. Reforms in the governance is inevitable to mitigate the systematic deficiencies such as regulatory environment and accreditation system, inflexible academic structure, uneven capacity across various subjects, eroding autonomy of academic institutions, funding policy, unwieldy affiliating system, absence of incentives for performers, shortage of quality and competent faculty, obsolete examination system etc.

Program of Action:

3.1. Complete de-linking of +2 from the ambit of Higher Education.

3.2. Posting of regular Principals based on Merit to be assessed through interview for both the Government and Govt. aided colleges.

3.3. Presently there are three Regional directorates, one each at Bhubaneswar, Berhampur and Sambalpur. Three more be established in the North, South and Western region and delegate power to the Regional Directors for monitoring quality and effective administration of colleges located in remote areas, away from the existing ones.

3.4. Appointment of quality teachers, periodic assessment of performance of teachers, progress in research and quality publications are of primary importance to maintain standard in higher education.

3.5. In the Universities of the state (Affiliating, Cluster and Unitary) there should be provision of Post Graduate teaching and research in various basic subjects under all the faculties (Science, Humanities, Language, Commerce, Education and Law) as well as few interdisciplinary subjects as per the need of the region. Establishing such facilities the Universities can become complete and the students can get the opportunity to have choice of subjects as per the need under choice based system. The students will be empowered to learn multidisciplinary subjects and can carry out research under inter-disciplinary mode with quality publication.

3.6. Due to the demographic advantage, success of Higher education will ultimately define the sustainable progress of the state in the new millennium. Therefore, the HE, Govt. of Odisha needs to be associated with all developmental activities of inter-ministerial departments.

3.7. At the ground level the HEIs are run by Vice-Chancellors, Principals, Directors and Chairman etc. They should be given proper training, support and place in SHEC.

3.8. Part of SHEC functionality need to include Accreditation and quality assessment in HEIs, Research promotion, Retraining, Leadership development, Improving access, equity and inclusion, Business incubation, campus security and full computerization of HEI governance.

3.9. Rationalisation of Service conditions of University and college employees including those of teachers.

3.10. Rationalisation of appointment of faculty per stream with consideration of research and teaching.

3.11. Appointment of adhoc teachers to be stopped completely. Teachers to be appointed through OPSC in Govt. colleges and SSB in Govt. aided colleges. This will bring uniformity in the teachers' cadre in HEIs and maintain quality.

3.12. Promotion of teachers in Govt. and Govt. aided colleges be uniform for career benefits. This should be done at regular intervals following appropriate procedure.

3.13. President of the Governing body of the colleges need to be academicians of repute from the region with experience on academic administration.

3.14. Role of Laboratory Assistants and Laboratory Attendants in science laboratory is important for imparting hands-on training in practical classes of HEIs. Imparting teaching in science subjects without support staff/Laboratory staff is unthinkable. These posts be sanctioned and filled-up following due procedure.

3.15. Colleges and Universities procure computers, equipments and costly gadgets out of UGC, Central/State Govt. funds but often they lie idle and are damaged or become obsolete resulting in loss of resources and facilities. Universities and Lead/Autonomous colleges shall have an Engineering/Maintenance Unit to maintain and repair computers, equipments and accessories. Skilled personnel shall be appointed to run such units in Universities and colleges.

3.16. State higher education budget be raised to 6% of GDP with increase in allocation for research, infrastructure and maintenance; 30% of the state budget be allocated for education.

3.17. Vice-Chancellors of Universities be fully involved in major decisions regarding academics or research in the state.

3.18. The state funded HEIs carry a major burden of providing access and equity to make higher education as inclusive as possible. The private run HEIs do not carry this burden. Therefore, a catch up grant to State HEIs be provided to achieve reasonable parity in civil as well as learning infrastructure. SHEC need to develop a norm based funding for excellence in public funded HEIs and timelines to ensure autonomy with financial and administrative accountability.

3.19. The state owned HEIs are equipped with trained faculty as per UGC guidelines. They also apply and get government funding for research projects. In this respect, the private HEIs be assisted in faculty retraining and funding for research.

3.20. Rural campus with incubation centres be created in all state universities. This will improve access.

3.21. Higher Education Institutions should remain open throughout the day during the office hours (six days a week), and the teachers to remain present for a minimum period of 5 hours each day and 40 hours per week.

3.22. The administrative authority of the college and University should ensure that the employees stay near the institution as per Govt. rules.

3.23. Teachers should be allowed to join teachers training courses/Refresher courses whenever selected, including the Jr. Lecturers working in degree colleges. However, they should complete the course assigned in respective semesters by taking extra classes.

3.24. Withdrawal of unilateral ban on opening of new streams and subjects in HEIs is required, SHEC should form a committee to examine new proposals and recommend to Government.

3.25. A cadre for non-teaching staff in each University be introduced. They be given opportunity to upgrade their education and skills through training in the same University without compromising their scheduled working hours.

3.26. SHEC to form a committee to coordinate HE with Mass and School education with regard to maintenance of quality in the early career of learners. This would maintain the continuity of the curriculum and standard of students when they enter the HEIs.

3.27. The overall syllabus structure and pattern of evaluation of CHSE need to similar to that of CBSE so that students from rural areas of the state studying in Public funded institutions are empowered to compete successfully when admitted to HEIs.

3.28. Each District need to have a Government college. The non-Govt. college of each dist Head quarter where there is no Govt. college be taken over by the Government.

3.29. There must be a total ban on participation of teachers of HEIs in private coaching. The teachers of HEIs be engaged in tutorial/ remedial classes to clarify the doubts of students. The proctorial system should be rejuvenated.

3.30. The Principals of affiliated colleges should be accountable to the University with regard to maintenance of quality of teaching, research and overall academic progress of the Institution. A meeting of all the principals of the Colleges, the concerned University administration and the Officers of SHEC be held yearly in the University premises to review the academic performance of colleges.

3.31. A transparent and accountable mechanism be established and governed by SHEC for redressal of the grievances of employees of HEIs to avoid huge piling up of court cases which drain the productive man hours of the officers and resources of HE.

3.32. Academic Calendar:

- (i) Opening of College/Universities after summer vacation: 16th June
- (ii) Admission to be completed : 15th August
- (iii) Students election to be completed: 30th September

- (iv) Odd semester (1st and 3rd) course to be completed: 30th November
- (v) Odd semester examination:: 1st week of December onwards
- (vi) Students' Union/Cultural functions: 15th January
- (vii) Even semester (2rd and 4th) course to be completed: 31st March
- (viii) Even semester examinations: 1st week of April (Final year examination to commence 15 days before this schedule for timely publication of results)
- (ix) Summer vacation to commence: 2nd week of May

4. Ranking and accreditation: Increase in the number and heterogeneity of Institutions of higher learning necessitated UGC to set up quality assessment systems for improvement of quality teaching-learning process. Such quality assessment by an autonomous body called National Assessment and Accreditation Council (NAAC) has done appreciable changes in the system. Hence it is mandatory for all educational Institutions to be accredited by NAAC.

Program of Action:

4.1. Since it is difficult to go for NAAC accreditation by all colleges of the state within a definite time frame, the State Govt. need to establish a State level accreditation of Institution for assessment of all the higher educational Institutions. The principal purpose is to sensitize the HE institutions for accreditation basing on the seven parameters stipulated by NAAC. The common assessment and accreditation system for the state would bring out the best in the institutions against national and international benchmarks of quality.

4.2. All the HE institutions to be dynamically assessed by Accreditation and Assessment System of Odisha (AASO) through a two step process of self evaluation and peer review following the 7 point guidelines of NAAC once in three years. The entire exercise be carried out by a dedicated agency through SHEC assisted by a third party with national and international exposure to ensure best of benchmarks of quality.

5. Regulation: The number of Universities of different categories (Affiliated, Cluster, Unitary and Professional) has increased during the last 30 years which necessitates updating the Act and Statute for their proper functioning.

Program of Action:

5.1. The University Act and Statute be amended as per the necessity and be modified for all types of University.

5.2. Orissa Education Act 1969 be amended as per the requirement to govern the increased number of Government and non-Government colleges of the state.

5.3. Accounts Manual for the Universities be revised following OGFR rules of the Government with modification as required for the University administration.

6. Restructuring state Public Universities:

(I) The affiliating General Universities Of the state, currently seven in number (Utkal, Berhampur, Sambalpur, North Orissa, Fakir Mohan, Rama Devi Women's, and Jagannath Sanskrit University) are expected to monitor the colleges under their ambit and ensure that the colleges have necessary infrastructure including qualified teachers to impart quality teaching. But in the former three cases the number of affiliated colleges are large in number, distributed over a large distance from the main campus hence it is often difficult to manage. It is suggested by various commissions set by UGC to limit the strength to a maximum of 100 affiliated colleges per University for effective administration and monitoring their quality. National Education Policy (NEP), 2016 also emphasized maximum number of 100 affiliated colleges per University.

(II) A sizable proportion of the colleges in the state do not meet the bare minimum requirements in terms of physical facilities, infrastructure and human resources as prescribed for recognition under 12(b) of the UGC Act. Thus they are unable to access development assistance from the UGC. This serious lacuna is to be addressed on priority.

(III) More than half of the faculty members are without M.Phil. or Ph.D. As a result they cannot guide project work of the students which is compulsory while pursuing UG degree in colleges under the CBCS system to be implemented from the year 2016-17.

(III) Many of the teaching fraternity in Govt. and Govt. aided colleges are placed as Reader and /or Principal I/C, and getting UGC scale of pay but without a Ph.D. degree to their credit. Hence project work and research activities cannot be monitored in such institutions of higher learning. This problem need to be urgently addressed to make the CBCS system successful upon introduction in colleges.

(IV) The linkage between higher education and development of a state is so vital that it is widely believed that the state does well so long as every thing is well with the institutions of higher learning. It is also a historical fact that in vibrant societies the academic and the state are in loggerheads and whenever academia has been made to succumb to the might of the power-that-be, the consequence have been disastrous.

(V) Autonomy to the Institutions of higher learning is important. However, institutional autonomy must not be construed as a blanket freedom to do whatever these institutions desire to do. Instead the more important interpretation of the term would mean freedom to do whatever they are expected to do in the larger societal interest. The challenge is to strike a fine balance between autonomy and accountability in our higher educational institutions.

Program of Action:

6.1. As per the need Affiliating Universities may establish off campus centres in the Autonomous/Lead colleges under their jurisdiction for effective monitoring of the academics and examination of all the affiliated colleges. Such off campus centres be established with the approval of SHEC.

6.2. If a new University is established it should not be by upgrading existing Autonomous college/Lead college. These colleges be affiliated to the newly created University so that under graduate teaching of these established colleges is not hampered.

6.3. A team of officials of the University should visit the affiliated colleges which do not have 12(b) approval of UGC, appraise the college authority about the requirement and facilitate the process.

6.4. In colleges, the managing committee members should preferably be with minimum graduate qualification; for Technical colleges, accordingly they should have preferably degree in Technical education and for Universities minimum a PG degree, Ph.D. preferred.

6.5. For guidance of research leading to Ph.D. the teachers in colleges with honours teaching facility in the subject concerned be recognised as guide or co-guide provided they have a minimum of 5 years of experience, published papers in peer reviewed journals and approved by the SRC of the University. Unless the college teachers are allowed to guide research, the pool of experienced researchers in the state cannot be created to guide project work of students under CBCS course and also to compete for higher positions (Associate professor and Professor) in Universities. With such a provision teachers in colleges can get research projects from external funding agencies, guide research students as well as in-service teachers which may fill-up the shortage of faculty with Ph.D. degree.

6.6. The existing ceiling of 100 teachers per year to avail study leave be changed to "maximum of 10% teachers of the subject concerned on roll in HE can avail study leave at a particular time".

6.7. HEIs need to develop an inclusive, democratic, participative teaching and research method aimed at self-regulation and capacity building and responsibilities of faculty.

6.8. Self financing institutions should function under the ambit of an affiliating University after fulfilling the terms and conditions of affiliation. The fee structure for the courses offered in these institutions be fixed by an expert committee under the control of OSHEC.

7. Quality and Excellence: Quality improvement and achieving excellence must be ensured in all aspects of Higher education. For sustaining excellence without compromising quality in Governance, Establishment of Internal quality assessment cell (IQAC) in all HEIs be mandatory.

Program of Action:

7.1. Every HEI must have a fully functional IQAC with clear goal settings

7.2. State Higher Education Council (SHEC) must establish an accreditation cell and evolve a SOP for Academic, administrative and environmental audit. IQAC will be responsible for implementation of all programs.

7.3. IQAC will be also responsible for strategic planning and Institutional Development planning.

7.4. Institutional Leadership has been the major hurdle in failure of HEIs in Odisha. The SHEC must initiate leadership development programs for future Principals, Vice-Chancellors and Chairman PG Councils.

7.5. The state owned HEIs in Odisha be given catch up grant for automation and computerization.

7.6. IQAC must ensure Student-Community participation and regular meeting of PTA (Parent Teacher Association) to get feedback.

7.7. Anti Plagiarism check to be instituted across universities in all dissertations and publications.

7.8. Environment protection activities and innovative educational methods are to be designed and executed by IQAC.

7.9. State should establish a Education statistics cell for data collection, compilation and consolidation, and geo-tagging of HEIs on various parameters.

8. Teaching and Learning: Teaching-learning-evaluation practices are the most important component bearing on quality upgradation and excellence. In the State of Odisha, particularly the state owned HEIs, these practices have followed the time tested patterns with very little change.

Program of Action:

8.1. Syllabus content to be regularly revised in content (once in 2-3 years) to keep the standard equivalent to best performing Universities and also incorporate Odisha specific topics

8.2. Choice based credit System (CBCS) to be implemented as per UGC structure both in PG and UG Courses. Curriculum be updated at regular intervals.

8.3. Add on courses with additional credits be provided particularly in skill and heritage/culture courses.

8.4. Practical, experimental and field studies to be integrated into the curriculum at both UG and PG level.

8.5. Syllabus modification to be done in consultation with students, teachers and industry or other job providers.

8.6. Teaching plan must be made available at the beginning of Academic Session. Examination Schedule to be strictly maintained.

8.7. At the beginning of each session, induction program must be introduced. Depending on requirements, remedial classes for the needy students to be introduced

8.8. Teaching needs to be a mix of Chalk and board and ICT enabled with a definite component devoted to inductive or participatory technique.

8.9. Student and distinguished Seminars are a dire necessity in HEIs. Hence seminars/workshops and allied activities must be conducted regularly in all HEIs.

8.10. Student projects be given due place, particularly at PG levels, it should result in a publication.

8.11. Student feedbacks as well as innovative methodologies used by faculty must be part of Annual Performance Assessment Report (APAR).

8.12. All Human Resource Development Centres of the Universities be strengthened to operate as a full fledged Teacher's re-education program centre. It need to be residential, with separate staff and regulated by the SHEC, Odisha. The courses to be imparted in

workshops need not be subject specific, rather should include various other fields like environment, ecosystem, administration, health and sanitation and language etc

8.13. A policy on student union elections to be formulated. Due to the associated violence and campus turbulence, this drastically affects the number of teaching hours which has a direct impact on implementation of CBCS.

8.14. Sports, Physical education and Yoga be introduced as credit course in all HEIs in Odisha. Physical Education, in particular, be opened as a separate Department.

8.15. Physical education teacher be posted in each HEI. Each college need to have a play ground. The job chart of the PET be defined and monitored strictly by the Principals.

8.16. Community Service for students in HEIs be made compulsory and be reflected in their certificate as non-credit course. NSS, NCC, Red Cross or Disaster Management and allied activities be included in this.

8.17. The compulsory paper on Environmental studies in UG course to be taught by teachers having degree in Environmental Sciences. Hence teacher on Environmental science be posted, one each in autonomous/lead colleges with the condition that they will teach the subject in colleges under the jurisdiction of the respective University.

9. Skill Education: It has been recommended by Ernst & Young in their Skill Gap Assessment for the State of Odisha – A District wise Analysis report that the State of Odisha should all stages of skill development in a comprehensive manner. Broadly, the skill development has three distinct stages. These are the preparatory stage where the individuals get the required education levels and pre-assessment is undertaken to assess their potential and aptitude for a particular skill. The second phase is the training phase which is usually given the maximum emphasis. This phase is significant since focus is required on varied fronts – relevance, course content, infrastructure, quality of training. The third phase is the placement phase where focus is on an individual either for employment or self employment. These activities need substantial research, content development, delivery and also outcome analysis which needs to be undertaken in a dedicated university on skill development Government of India has taken initiatives in this direction by establishing a Ministry of Skill Development and Entrepreneurship and has started Pradhan Mantri Kaushal Vikas Yojana (PMKVY).

Program of Action:

9.1. SHEC need to conduct study from time to time for identification of job oriented skills required in job market. This survey to be carried out assessing the local, regional, state level, national as well as global needs. The syllabus to be prepared accordingly with 75% devoted to hand-on components.

9.2. Communication (Oral and Written) as well as ICT skills to be made compulsory in the course curriculum.

9.3. Skills oriented courses be introduced so as to integrate and commensurate with learning syllabi at each level i.e. PG and UG (Subject wise). These can be separate courses or add on courses carrying credits depending on need.

9.4. All universities need to establish board of studies (BOS) on skill. It be a multidisciplinary Board with one or two industry member. Subject BOS to identify marketable skills to the BOS on Skill for formulation of the syllabus.

9.5. Every HEI need to establish student incubation centres and entrepreneurship training centers to run on a self supporting mode.

9.6. Community work for UG and PG students during vacations be introduced with the provision of additional credit for such work.

9.7. Community college be established in each Higher Education Institution, or a model college at least in each block level having infrastructure to promote skill education along with the CBCS course. This would translate the demographic dividend with higher number of youth than older population to a powerful engine of growth. Hence SHEC should take appropriate step to provide quality higher education along with skills to the youth to empower them.

9.8 There is a need to establish a Skill University in the State of Odisha to cater to the huge skill development initiatives. The states of Gujarat, West Bengal have already set up private Skill Universities.

10. Examination and Assessment: There is an urgent need to reform the examination system. Presently, there is too much person specific question setting and assessment. Also there is a need to minimize the assessment through optimizing the workload on the teacher assessors. Hence under this system changes are required to be introduced to make the examination and assessment system transparent and time bound publication of results.

Program of Action:

10.1. Subject wise question banks and model answers to be prepared both for long and Multiple Choice questions

10.2. Software to be developed for auto preparation of question paper and transmission to Examination centres

10.3. Gradual shift to on-line examination on secure website

10.4. Question paper to be a mix of multiple choice (OMR 30%), short and long questions.

10.5. Question settings be made through a panel of experts and there should be a mechanism for monitoring quality of questions through an appropriate Academic body set up by SHEC. Instant exams be conducted for students having academic arrears/back paper within 30 days from the publication of the results.

10.6. Coding system and online evaluation of answer scripts be introduced. No additional sheets be supplied.

11. Research and Innovation : Research and innovation in universities forms the back bone of all scientific, industrial and societal advances in most western as well as south Asian countries. Though the mission of higher education in India was similar, the implementation was skewed due to establishment of mission research departments, systematic weakening of university system and subsequent rise of research universities. However, of the 788 Universities operating in India at present, and failure of the mission research institutions to effectively address people's problems brings us back to strengthening of the university research system as an alternate solution. State Governments and their education policies gave little importance to research in the past. Central Government agencies have been particularly favouring central institutions like IITs, NITs, IISERs, NISERs etc. over state HEIs. Hence it is necessary to develop a stake in University for research and orient it towards the mandate of the state.

Program of Action:

11.1. Research, development and innovation must be a priority in Universities through involvement of faculty and students. Research need to be a mix of Basic, applied and community directed action research.

11.2. Research infrastructure like Inter-university centre for research, Central instrumentation centre, Central computing facility be created to cater to and give a boost to major research areas.

11.3. The teachers in HEIs should avail schemes like major research and minor research projects by the UGC, AICTE, DBT, DST, ICSSR, SCIR, MOEF, MOES, ICHR, ICPR and several other funding agencies in almost all disciplines besides International collaborations on projects of mutual interest. Due credit be given for getting and successfully completing funded research in their career advancement. A part of the overhead grant can be given for upgrading the infrastructure of research in faculty concerned.

11.4. All young faculty (below 45 years of age) may be provided with a nominal seed money of Rs. 5 lakh in a competitive manner by submitting research proposals on areas of interest to the state. The SHEC will create, execute and monitor the seed research fund by an established mechanism.

11.5. The SHEC may also operate funding for innovative out of box concepts relevant for the state. These be made competitive and administered like the seed research funding. The outcome also be monitored.

11.6. Research Scholars in universities be treated as an asset and nurtured. SHEC or the State higher education scholarship council must introduce few research scholarships on topics of international interest and important to the state of Odisha. This would be awarded on application and competitive basis. Financial assistance be provided to students for pursuing research after P.G. who do not get fellowship from other sources like UGC-JRF-NET and other Central Govt. schemes.

11.7. Every University need to develop a visitor's hostel for persons of eminence and bilateral collaboration researchers can come, stay for a period and work with our scholars. This will form part of the Scholar-in-Residence program.

11.8. Bilateral foreign collaborations be encouraged. This should incorporate visits from both sides. The state of Odisha can sign bilateral collaborations with neighboring countries and their universities.

11.9. Community research, industry funded research and innovation must be encouraged. OSHEC needs to form a Research & Innovation committee to formulate policies with respect to this.

11.10. Each university need to identify few areas of strength and strive to establish centres of excellence around them. This can be established in a Hub and Spoke model with the lead

university in the role of Hub as per meta University concept. This can also be a model for World Bank funding.

11.11. For all faculty in universities at least one publication in peer reviewed journal papers/patent per year be the criteria for annual increment/promotion. For college UG teachers this would be scaled down to 1 peer reviewed journal papers/patents in two years.

11.12. All universities will have incubation and innovation centres with basic facilities.

11.13. State Government may create a few international Chairs in state universities in cutting edge research areas. OSHEC to form a committee to formulate policies for appointment of Chairs.

11.14. Special centres of excellence in Odia language, literature and culture with emphasis on tribal and local heritage studies be established in all the Universities of the state.

11.15. Subjects of state and community interest like water, energy, environment, bio diversity, climate change resilience, food and nutrition, disaster management be given priority for action research funding.

11.16. Ph. D., D.Sc. D. Litt. and LL.D. programs be streamlined, uniform across the state in terms of quality check and uploaded to Shodh Ganga for general peer review. This will ensure quality.

11.17. The teachers in colleges be granted Academic leave up to 15 days per year to participate in National/International conferences/Symposia and present research papers.

11.18. Over the next decade few Centres/Departments and Incubation Centres of excellence in HE be established in both public and private sector. Private Trusts and Foundations with proven expertise be permitted to establish such Centres. However, SHSE should regulate the activities providing access to all sections of the society and outcome of these Centres.

12. On line Courses:

(I) Online courses and e-learning/teaching are essential in HEIs for which Universities of Odisha should be equipped to implement in their affiliated institutions. On line courses are very good vehicles for increasing access particularly amongst the marginalised classes. At the same time, the degrees accruing from on line courses shall be treated at par with regular courses by employers and the public at large.

(II) The Open and Distance Learning system (ODL) is now growing faster compared to the conventional system. To create a sense of credibility of this system, quality assurance is important.

(III) Massive Open Online Courses (MOOCS) are necessary to be provided by Universities that can make access easy to University level course content for every learner.

Program of Action:

12.1. The HEIs offering ODL need to develop quality in terms of course material, multimedia packages, managing student support system and updating technical assistance to both teachers and learners.

12.2. Like the regular courses, online courses need to have add on courses for additional credits and skill based courses with certification procedures.

12.3. For weaker students and sections, supplementary materials and supplementary coaching be introduced.

12.4. New modular courses aimed at enhancing the general capacity of a student be taken up through Open Distance learning.

12.5. Govt. Of India has already implemented SWAYAM (Study Webs of Active-Learning for Yong Active Minds), Digital India programme and many more in which the HIEs of the state should participate.

13. Technology Enabled Learning :

(I) Technology has come to be indispensable in our daily lives. Higher education cannot remain an exception. In fact, all the major missions of higher education namely; access, equity, inclusion and excellence can be achieved through adoption and integration of technology. HEIs in the state have begun ICT enabled teaching but it is only a tip of the ice berg. The future of education will be greatly shaped by digital learning courses and Massive Open Online Courses (MOOCS). Hence there is a need to upgrade and develop high quality ICT facilities in HEIs of the state. Students, equipped with the latest knowledge and technological skill will be in an advantageous position to face competition globally.

(II) In learner centric paradigm of education students are to be encouraged to take greater responsibility for learning outcomes. The teacher ceases to be the fountain of knowledge filling the empty student's minds; instead students need to actively participate in the discovery of knowledge through technology enabled learning and project works, internships

etc. Such teaching-learning methodology to involve less lecturing and blind note-taking and more hand-on activities to facilitate experimental and interactive learning which should be an integral part of the curriculum. Open and Distance learning system to use on line interactive teaching through internet as well as prepared modules for areas where internet is not available.

Program of Action:

13.1. Smart class rooms with online availability of internet resources, e-library resources and editing aids for regular teaching.

13.2. Availability of Digital library resources in all HEIs.

13.3. Complete use of ICT in teaching learning process.

13.4. Creation of virtual Classrooms among State Universities. All universities to be connected in a manner to receive common broadcast.

13.5. Campus WI-FI and availability of NKN in all HEIs.

13.6. Student life cycle, examination and assessment and employee life cycle to be in place in all HEIs.

13.7. e-admission, mission admission, counselling and mentoring Government website to guide students for admission into colleges and Universities, and bringing out academic calendar in the beginning of each academic session to be adopted by all HEIs of the state.

13.8. A know your Institution portal (including web-site) should be mandatory for all educational Institutions of higher learning.

13.9. All HEIs must provide up-to-date yearly data in the AISHE portal of MHRD which would enable the state to prepare policy guidelines for improvement in teaching/learning from time to time.

13.10. The Universities should follow the guidelines/Regulation of the Govt. for open/distance learning system.

13.11. NEP (2016) has proposed to set-up a National Institute of Open Learning in collaboration with Ministry of Skill Development and Entrepreneurship. The DDCE of Universities of the state should follow the guidelines to impart skill development and entrepreneurship courses.

14. Linkage with Central Institutions: Central institutions that are of interest to HEIs in Odisha can be categorized into two types:

(I) Organisations like DAE, DST, CSIR, DBT, MOEF & Climate Change, ISRO, ICSSR, UGC and many others which not only work as teaching/research institutions but also work as funding and facilitating agencies.

(II) Organisations that are mainly teaching/research based like IIT, NIT and Central university.

The HEIs should develop linkage with these Institutions for student mobility, collaborative research, project work, joint seminars and workshops, and faculty exchange activities.

Program of Action:

14.1. To achieve these objectives faculty of universities and colleges to explore possibility of collaboration and funded research projects.

14.2. MOU be signed between universities and central institutions for joint work and use of research facilities.

14.3. The scientists of Central Govt. Institutions be recognized as Research supervisors in Universities. Visiting faculty/Adjunct faculty positions in Universities be offered to teachers/Scientists of these central institutions.

15. Institution-Industry linkage and Employability: Private-Public partnership and the industry interface can take place in the field of education at all levels, and particularly in backward regions, which is the need of the hour. To achieve excellence, it is needed to create a real partnership between government, educators and industry partnership that can provide our high tech industries with skilled workers who meet the standard of their industries.

Program of Action:

15.1. Academy-Industry interaction is woefully inadequate in Odisha and India as well. This culture is almost non-existent in India and a better perception of strength of such a system needs reformation from both sides. Industry are one of the main beneficiaries of our education system and in their interest, they should become active stakeholders in education.

15.2. There is a view that many products of our academic system are not readily employable and needs retraining to the requirements of the Industry. This be addressed through Industry participation in curriculum development and partial teaching of courses.

15.3. Industries should reciprocate through creation of chairs to attract eminent scientists to Universities and train students for mutual benefit. Active engagement of Industry in the project work of final year students would help both academics and Industry. Universities to take part in R&D activity of Industries.

15.4. Industrial personnel to be member of the GB, BOS and train students for employability and placement.

15.5.Improvement of ambience of Institutions with contribution from CSR 2% money of the profit of industries is required. MOUs be signed with industries located in the region in this regard.

15.6. Under College-University-Industry linkage, production centres from the outcome of skill/vocational courses be established in HEIs.

16. Teachers:

(I) No effort to reform higher education shall succeed unless we focus on getting the best and most trained teachers in adequate numbers in higher educational institutions. Manpower policy and development of faculty requires motivating teachers to ensure quality in teaching and learning, institutional vision and leadership, curriculum planning and implementation and teachers' social responsibility. This requires (i) strong post-graduate programmes across all disciplines with due emphasis on developing teaching and research skills so as to provide steady flow of talent to the Ph.D. and post-doc programmes aiming at perfecting teaching and research skills, (ii) a meticulously designed fool proof system of testing abilities and certification to identify the best possible candidates to pursue teaching and research as career, (iii) enabling conditions and working environment for the faculty members to engage in the pursuit of teaching, research, publications, consultancy and extension activities with dedication and commitment, (iv) performance-linked and incentive based career progression of the teachers, (v) in-service career advancement and leadership development programmes through continuous education and training to train the teachers to take greater responsibilities, and (vi) global exposure to the faculty to broaden their horizon and exposing them to the best global practices in curricula development, pedagogy, teaching and research etc.

(II) Teacher being the single most critical determinant of the content and quality of higher education, ensuring steady availability of quality teachers is a strategic necessity. Ideally we must target the student-teacher ratio to a maximum of 15 in Universities and 20 in case of under graduate colleges. Young trained Post Graduates who wish to take teaching as the

career should avail the opportunity of availing the expanding Ph.D. programmes of the Govt. through Junior Research Fellowships, Senior Research Fellowships, Moulana Azad National Fellowships for minority students, Rajib Gandhi National Fellowship for SC and ST students, Kothari Fellowship, and a number of other fellowships of DST, DBT, ICSSR, ICHR, ICPR etc. Over time, the number and amount of these fellowships are being enhanced substantially to make them further lucrative to attract talent.

Program of Action:

16.1. Motivational programmes at college, university and state levels need to be organised. Short term orientation workshops for teachers of 3 to 7 days duration should be a regular activity in the HRDC of all Universities. Teachers in HEIs be sensitized about teaching methodology through these workshop/trainings.

16.2. Vacancies of teaching positions in HEIs be filled-up following appropriate procedure within a time frame. OPSC should conduct interviews regularly and fill-up all sanctioned posts in colleges.

16.3. Superannuated teachers to be engaged in teaching to make up the deficiencies in HEIs. Adhoc teacher appointment and guest teacher appointed be stopped.

16.4. State Level Eligibility Test to be conducted by SHEC through a committee for creating a subject-wise pool of teachers to be engaged as guest faculties. The Universities also to prepare a pool of qualified teachers for courses under SFC in P.G. level.

16.5. There must be written and viva-voce test in the process of selection of teachers in colleges. Due consideration be given to candidates having excellence in sports and cultural activities.

16.6. The existing regulation for Tutorial and proctorial classes be reactivated and implemented for UG level with minimum 40 students per class per subject in all HEIs.

16.7. Rationalization of salary structure for teachers having same qualification and competence is required.

16.8. The system of Grant-in-Aid be continued instead of Block grant to non-Govt. employees in HEIs.

16.9. Induction programmes for at least one month for freshly recruited teachers be a regular feature in future appointments.

16.10. Principals cadre for Govt. as well as non-Govt. colleges be prepared through a committee basing on qualification, experience and competence of the teachers and they be posted as regular principals in HEIs.

16.11. Professor be recruited through OPSC and posted in Govt. colleges. However, once posted they should not be assigned administrative jobs. For administrative job, the cadre seniority (at Class-II level) be considered.

16.12. A teachers cadre for Autonomous colleges (Separately for Govt. and non-Govt. colleges) be formed taking option of the teachers in the colleges, and they be posted accordingly.

16.13. Teachers in HEIs to be motivated to adopt nearby schools/villages for awareness programmes of societal relevance.

16.14. Teachers who are serving in difficult areas be allowed to exercise the choice of next posting. Further, every employee must serve in difficult areas for a certain period of their service.

16.15. Accountability and code of professional ethics for teachers and employees of HEIs be strictly regulated. This should be reflected in the annual ACCR and action be taken on adverse remarks.

16.16. In the way to achieve quality of teachers, certain standards can be fixed to serve as "Benchmark", as follows: (a) Publication of specified number of research papers in peer reviewed journals in a year (say at least one per year), (b) Publication of books/Monograph (say one in 5 years), (c) Attending national seminar/conference/workshop outside the state (say one in a year), (d) Organisation of seminar/conference/workshop by the Department (at least one in two years), (e) Attending International seminar/conference/ workshop with accepted paper for presentation (say one in three to five years).

16.17. Basing on these criterion and several other criteria on teaching activity, student support activity and administrative duties performed as given in Annexure-III, annual performance of the teachers in colleges and Universities at UG and PG level be assessed and constitute award for best teachers of different disciplines. All the teachers need to submit the filled-in proforma with relevant documents online to the respective Universities which be assessed and submitted to SHEC. Biodata of the short-listed teachers, discipline wise from all Universities of the state be reviewed through a committee and best teachers be awarded annually on Teachers day, 5th September each year.

16.18. Quality of HEIs is closely linked with improved service condition of teachers, adequate infrastructural support, recruitment of qualified teachers and capacity building of teachers. These should be considered to improve quality of HE in the state.

16.19. Monitoring of class room teaching of teachers in colleges and Universities is required by appropriate authorities.

16.20. Assessment of academic performance and academic accountability of public funded as well as private HEIs recognised by the Govt. should be conducted yearly and data based be maintained by SHEC.

16.21. Mobility of experts from other fields like Industries and Govt. for teaching and *vice versa* by allowing lateral entry following UGC/MHRD rules be implemented in the state HEIs.

16.22. Leadership development centres to offer short-term programmes for senior faculty for management of HEIs be carried out by SHEC yearly.

17. Student support and progression:

(I) Students are human beings first. They have career goals as well as social and personal needs. Hence in an Institution student support system, especially teacher-student bond builds the foundation upon which sense of belonging grows. Hence the administration should take keen interest in student affairs and should have requisite competencies to handle delicate issues concerning students. The students in turn develop a sense of belonging when they know about their institution well and when their voice is heard within the Institution.

(II) Today students need quality services such as library, ICT and administrative support and want them to be tailor made for their requirements. Hence monitoring students progression, performance, learning outcomes, skill enhancement and their participation in the activities of HEIs is required.

Program of Action:

17.1. Each HEI should have data on the students life cycle starting from admission and their career progression and stored electronically for monitoring their development. Documentation of students' progression through respective departments is required

17.2. Scholarship be provided to the needy students and scholarship disbursement be linked to AADHAR to avoid duplication.

17.3. Each student be mentored by his/her proctor and be provided support on various spheres. In addition the proctor is required to expose the students to various career options through career counselling cell.

17.4. Seminars/ workshops for students should be regular activities in HEIs

17.5. The students should be encouraged to participate in cultural activities like talent search, sports and games, youth festival, extempore speech etc.

17.6. Students' performance be measured through concurrent evaluation. In addition, Students be asked to assess the learning outcomes.

17.7. Add-on non-credit courses be introduced on Communicative English, Basic Computer Education, Personality Development, Event Management etc. in CBCS courses at all levels.

17.8. Students assessment on the performance of teachers be made compulsory in HEIs. This should be obtained during each academic year, analysed and remedial measures be taken.

17.9. Student diversity be properly documented by the institution/department. Specific institutional strategy be evolved for expanding the arena of diversity so as to make it demographically inclusive.

17.10. The teaching should be Interactive teaching with a Student-centric approach.

17.11. There must be total ban on private coaching by teachers of HEIs. Universities and colleges should have regular remedial classes for students from all categories weak in subject matter as well as for competitive examinations.

17.12. Career counselling cell shall be opened in all HEIs to facilitate the students for job opportunities.

17.13. Ensure student representation in academic bodies of HEIs. Statutory provision of student representation in Senate of Universities be adhered with.

17.14. Effective student grievance redressal mechanism in HEIs be instituted. VCs and Principals of colleges shall have a cell to redress grievance of students atleast once in every month.

17.15. For personality development of students and better coordination among Universities, inter-University debate, cultural program and sports be organised.

18. Access, Equity and Inclusiveness: The intensive use of technology and reforms in governance are pillars of transformation of higher education in the state that would solve the three pressing problems: access, equity and inclusiveness. A multiple of problems confront vulnerable groups in accessing higher education and pursuing their studies in HEIs. Hence there should not be any visible or invisible differentiation in the ambience of teaching and learning in HEIs for different groups of students.

Program of Action:

18.1. Every HEI must have an annual program of awareness, sensitization and inclusive strategies including monitoring, coaching, counselling and scholarship with adequate support system in place.

18.2. Disables, Orphans and Transgender categories of students need to be given special privileges and support. The private Higher Education Institutions need to present adequate evidence of support in access to vulnerable sections of the society. SHEC must ensure that all public as well as private HEIs follow inclusive practices in their campus.

18.3. Incentives to be provided to teachers to acquire skills to deal with differently-abled students.

18.4. Students' residence by design promotes exclusion (sequestered segregation). All residence should be for all, with affirmative action of earmarking seats for socio-economically marginalized communities.

18.5. Institutes located in difficult geographies and socio-economically challenged areas, and LWEA (Left Wing Extremist-affected Areas) be treated with reverse discrimination, that is, highly funding and also higher level of supervision to be extended to institutes which are not in the mainstream areas.

18.6. New initiatives of the Government of India to bridge gender gaps include Education for Girl child such as Beti Bachao, Beti Padhao Abhiyan, Swacha Vidyalaya, PRAGATI and SAKSHAM (Initiative for differentially enabled children) etc. Expansion of higher education has empowered women significantly. It is repeatedly emphasized that "India may become hub of women entrepreneurs in future". The UGC had a scheme for "Capacity building for women managers in higher education" which has become part of the scheme of development of Women's studies in Universities and colleges which need to be expanded in the state.

18.7. Various schemes are currently under operation by the central and state governments to empower SC and ST students by increasing their level of participation in higher education of which implementation of percentage of reservation of SC to 15.25% and ST to 22.5% in admission is one. There are also schemes for facilitating higher education for tribal students, e.g. post matric scholarship, book bank scheme for UG and PG students, fellowship for top class education of tribal students, computer training courses, special coaching, establishment of special cells in Universities for tribal students etc. There are also other schemes such as remedial coaching for SC/ST/OBC (non-creamy layer) and minor community students, Babu Jagajiban Ram Chhatrawas Yojana, Rajib Gandhi National Fellowship for SC students, National overseas scholarship for SCs, scholarship scheme of top class education for SC students, free coaching for SCs and Dr. Aambedkar post matric scholarship scheme, and Dr. Aambedkar Interest subsidy on Educational loan for overseas studies for economically backward classes. Students of SC/ST category in the state should avail all these opportunities for empowerment.

18.8. Opening of Centre for Study of Social Exclusion and Inclusive Policies (CSSEIP) in various Universities with financial help of the Central Govt. is required as it would act as think tank towards addressing dominant social exclusion problems. In the process of studying social exclusion related to dalits, tribals and religious minorities they provide input for formulating policies for protecting rights of these groups and eradicating their problem of

exclusion and discrimination. All the Universities of the state should have this CSSEIP facility with the support of UGC.

19. Outreach programmes relating to community: Outreach Programme is basically to create Common Facility Centre which could be used by the Community for livelihood, and by students for knowledge acquisition, thus creating respect for human values before learning.

Program of Action:

19.1. Adoption of village clusters; NSS activities, Redcross, Scout and Guide cells, Self defence of women; societal projects for benefit of rural population and their direct involvement should be the major agenda of the HEIs.

19.2. Growing environmental pollution and global warming are serious threats to mankind. HEIs need to integrate components of sustainable development of the society in their curriculum and undertake action programmes to inculcate sensitivity towards environment. Students must be involved in active manner in various plantation, cleanliness and energy conservation programmes. The focus and dream of clean and green India greatly depend upon these environmentally oriented and sensitive students with a motivation for societal responsibility.

19.3. To make higher education more relevant to community, UGC has introduced a scheme of Community colleges which offer low cost high quality education locally that encompasses both traditional skill development as well as traditional course work there by providing opportunity to the learners to move directly to employment sector or to move to higher education sector. Such colleges be established in almost all districts of the state which would cater to the societal needs.

19.4. The best initiative taken in recent times is Unnat Bharat Abhiyan launched by MHRD which is connecting higher education with society to enable technology and its use for development of rural areas. Under this all The HEIs have been asked to adopt five villages each; identify technology gaps and prepare plans for innovation that could substantially increase the incomes and growth in the rural areas. This should be declared mandatory for all educational institutions of the state.

19.5. Faculty should get involved with projects that are linked to communities where their institutes are located. They should involve the students in these projects. This should be part of the Choice Based Credit System (CBCS).

19.6. The students be encouraged to visit rural areas and this could be linked to their internships during the summer vacation, which may be made compulsory.

19.7. Research that is linked to public policy be encouraged in HEIs.

19.8. Essays and debates: The students be exposed to the socio-economic problems through debates and discussion both in as also outside the classrooms. There could be regular debate and essay competitions in HEIs.

20. Addressing regional disparity: Creation of trained manpower shall not be concentrated in one pocket, region or community. Higher education need to be imparted to all by expanding the existing Institutions and include all the eligible population.

Program of Action:

20.1. Expansion of institutional base of higher education, be it technical, professional or vocational is required by increasing the capacity of existing ones and establishing new ones taking the model of reputed ones in other regions of the state. This would remove the regional-heartland disparity and bring every one to the main stream.

21. Cultural values through language: These days there is a neglect of language learning which has its impact on decadence of writing skills of the students and increase in plagiarism in the system. It is a mystery that we have not thought of language's connection with thinking, reflection, inference and interpretation, all hallmarks for quality scholarship.

Program of Action:

21.1. Curriculum on communicative language skill is highly essential to be introduced in the course. In this regard, establishment of language labs with IT infrastructure relevant to the region is required in HEIs.

21.2. Culture, well-being and wellness and community responsibility is an important part of the education delivery. Thus observance of local festivals like Kumar Purnima, Shital Sashthi, Rajo, Nua Khai etc should be held in HEIs.

21.3. Local sports be encouraged in HEIs with yearly completion.

21.4. A book be published by Text Book Bureau both in Odia and English on local festivals, local sports, sacred places etc and multiple copies be made available in the libraries of all HEIs.

21.5. HEIs should take steps for integration of cultural excellence and folk culture activities of the region.

22. Internationalization: Developing International collaborations, MOUs, inviting faculties form foreign countries with subject expertise of regional relevance through GIAN (Global Initiative for Academics Networks) programme of MHRD; and even formulating joint projects for supports from International organisations like European Union are in force. GIAN programme is a new initiative of MHRD to facilitate the partnership between higher

education institutions of India and other foreign Universities offering 352 courses from 38 countries. These courses are looked as a starting point of long term research collaboration with foreign academics. Participating in these programmes would empower the students and teachers as well and focus the institution in international arena.

Program of Action:

22.1. Curricular design, Development and Delivery require international perspective in this globalized world to provide appropriate and relevant education. There be budget provision for the Universities for international mobility inviting Professors and decision-makers to visit, in order to facilitate meaningful partnerships.

22.2. Considering the spatial position and populace concentration of 38% in regard to SC & ST, Universities must explore the possibilities of partnering with Regional Universities, preferably of English-speaking countries.

22.3. Comprehensive partnership with foreign Universities/Institutions leading to joint course programme and their delivery be promoted in HEIs. To strengthen such partnership provision of award of joint degree be made. This is to be regulated by SHEC.

22.4. Universities be allowed to bid for international projects funded by e.g., US-Aid, European Union, OECD (Organization of Economic Cooperation Development), etc. There needs to be a policy clarity about sharing the surplus between the project implementers and the Institutes / Universities and to be monitored by SHEC.

22.5. There is now a trend for international students to visit India as part of their learning with credit transfer provision. Universities be encouraged for such partnerships. On a pilot basis, provision be made for funding for students of Odisha to travel to overseas Universities / Institutions for short term courses relevant to Odisha / Research purpose.

22.6. NEP (2016) suggested to tie-up Indian Universities with selected Universities from top 200 and to frame rules for award of degree. SHEC to take initiatives for tie-up of state Universities in this programme and frame rules.

22.7. Culture and language related studies for International students in the state Universities be initiated for internationalization.

22.8. Foreign faculties to join HEIs of the state for specific durations be initiated. SHEC to formulate the rules and make provision of additional financial resources to Govt. funded HEIs for the purpose.

23. Financing of HE Institutions:

(I) **Current state of affairs:** Between 2001-02 and 2014-15 the number of students in higher education (including higher secondary) has increased from 5.5 lakh to 11.5 lakh (109 per cent), the number of colleges increased from 1367 to 2396 (75 per cent), and the number of Universities increased from 7 to 15 (by 114 per cent). At the same time, the number of teachers increased from 23,303 to 27,729 (19 per cent only); and the allocation in the budget between 2001-02 and 2016-17 increased from Rs. 1698 crore to Rs. 2197 crore (29 per cent).

(II) **Gross Enrolment Ratio:** The Ministry of Human Development Resources (MHRD), Government of India (GOI) has come up with guidelines that access to higher education be increased such that the Gross Enrolment Ratio (GER) for 18-23 years age group reaches 30 in 2020. GER in Odisha for 2014-15 is 17.1 (estimates based on enrolment and aggregate population figures provided by MHRD, Table 1).

(III) **Population in 2020:** The population of 18-23 years age group in 2020 will be more than 51 lakhs based on the three-year moving average from single year returns for age-group of 9-14 years for 2011 census. In fact, the single year returns also indicate that the population for 18-23 years age group will reach its peak for Odisha in 2020.

(IV) **Enrolment in 2014-15:** Nearly 8 lakh students in the 18-23 years age group are enrolled in higher education in Odisha in 2014-15. Total enrolment has to be nearly doubled to more than 15 lakh by 2020 to reach the target GER of 30.

(V) **Enrolment provisioning by 2020:** Further, if attaining the target of GER 30 will not surmount to reducing capacities where GER is more than 30 for any region, the additional increase in enrolment has to be for 8.5 lakh students (Table 2).

(VI) **Distribution of enrolment across courses:** In 2014-15, AISHE for Odisha indicates that the distribution of students enrolled across different courses suggests that 82.0 per cent are in undergraduate courses, 10.9 per cent are in diploma courses, and 5.2 per cent are in post graduate courses, 1.2 per cent are in certificate courses, 0.3 per cent are in integrated courses, 0.2 per cent are in Ph.D. courses, and 0.1 per cent are in M.Phil. courses.

(VII) **Increasing enrolment:** The funding for an increase in enrolment would depend on the distribution ought to be in 2020. In 2014-15, the broad discipline-wise distribution of the number of institutions in Odisha indicates that there were 21 universities and 1065 colleges. From the universities, 13 were general, three technical, one each in agriculture, medicine

and law, and two others. From the colleges, 754 (70.8 per cent) were general, 25 (2.3 per cent) technical, 18 (1.7 per cent) technical, and 25 per cent were others.

(VIII) **Two-fold plan:** Assuming a similar distribution across courses, as in 2014-15, the plan has to be two-fold. One is to increase the capacity in some existing institutions, and the other is to increase the number of institutions providing such facilities. It matters from a funding perspective if these institutions are to be government, private aided or private unaided.

(IX) **Teacher-student ratio:** Assuming a teacher-student ration of 1:20, an additional student load of more than 8.5 lakh persons would also require and an additional funding for the recruitment of teachers. Improving the teacher-student ratio to 1:15 will have a further implication on fund requirement.

(X) **Additional load of postgraduate teaching:** Besides, some of the existing undergraduate colleges to be upgraded to address the additional load of postgraduate teaching. This also indicates an additional requirement in funding for investment in infrastructure and recruitment of teachers.

(XI) **Scholarships:** To incentivise higher education, scholarships to be increased to a reasonable amount. Meritorious students, as also those from underprivileged and vulnerable backgrounds need to be provided with scholarships (including fees). The scholarship need to be inflation-indexed.

(XII) **Beyond access:** Besides access, if we need to increase efficiency in governance, quality (excellence) of research and teaching, equity (including inclusiveness in access) and teacher-related as also student-related matters, the budget implications need to be separately worked out.

(XIII) **Planning at higher secondary level:** We would require good teaching and output in the form of students eligible for higher education at the higher secondary level. This need more schools, more teachers and better infrastructure at the higher secondary level. This will have an independent financial burden that is indirectly related to higher education.

(XIV) **World Bank's definition of knowledge economy:** "The economy which is able to acquire, generate, spread and utilize knowledge in an effective manner to accelerate the pace of economic and social development". Thus only economic growth is not sufficient; it should be coupled with growth in social sector, health, education and improved governance. Fruits of growth in every sector should reach equally to the lowest stratum of the society, not through trickle-down effect but through equitable distribution and sharing. These challenges

can be met through the system of education and education alone that we have hope of meeting these challenges.

Program of Action:

23.1. Increase budgetary provision: Budgetary provision for higher education need to be increased in absolute terms and also as a percent of Gross State Domestic Product (GSDP). NEP (2016) proposed 6% GDP as the norm for outlay on education which also be the norm for the state.

23.2. The state should plan and leverage funds under appropriate schemes by the central government, for instance, Rashtriya Uchchatar Shiksha Abhiyan (RUSA). The setting-up of model colleges for all students or for specific subgroups of population under RUSA could be based on GER for 2014-15 (Table 1) and also on additional requirement (Table 2).

23.3. Education cess: State budget may consider an education cess.

23.4. Fees: Globally, two broad patterns are observed. One is with complete fee waiver. The other is a largely self-financed leading to debt-burden among some students. The latter does include scholarships to some students based on merit and other criteria. In this context, it may be noted that the fees charged in Odisha by government and private aided colleges were fixed decades earlier. While the base fee has remained the same, some other components charged to students have been added or increased. Nevertheless, some contend that the fees should be increased to provision for some reasonable amount of untied funds to the colleges so that they can plan for activities that are required but have no earmarked funds (including those that could relate them to the community). However, an increase in fees may cause hardships to those from underprivileged and vulnerable backgrounds. Hence, fees for them should be waived, or provided by the government.

23.5. Public HEIs: Public funded Education system must be strengthened. This can only ensure equity, access and quality in the field of Higher Education. All HEIs to prepare micro-level operational plan of action.

23.6. Self-financing courses: Government institutes and private aided institutes may start self-financing courses that ensure placement/strengthening domain knowledge in interdisciplinary subjects. State must control and regulate the activities of Self Financing courses, Institutions and residential colleges. Rationalization of fee structure of these Institutions to the advantage of marginalized sections is required. The fees for these courses may be linked to loans without any third-party guarantee. SHEC must develop a mechanism to regulate self financing Institutions as well as self financing courses in Public HEIs.

23.7. Public –Private partnership (PPP) and University-Industry Linkages (UIL): Innovative PPP and UIL policy and practices are required to expand opportunities and to address financial constraints by bridging gaps. Given diversified needs of the students across universities and regions along with universal need for quality education and training with appropriate capacity building, a PPP policy be formulated.

23.8. In Public-Private partnership SHEC must play a regulatory role for accountability and transparency. A comprehensive study for ‘demand and supply’ scenario be prepared to quantify the need for funding. For example, project based ‘Viability Gap Funding’ can be considered where financial viability is not there but economic and social viability is high. PPP and UIL policy, if in place, can ease some of the financial constraints in infrastructure building and educational service delivery.

23.9. Other sources: The institutes may receive funds from Corporate Social Responsibility (CSR) funds of different enterprises, District Mineral Fund (DMF), Member of Parliament Local Area Development (MPLAD) Fund, Member of Legislative Assembly Local Area Development (MLALAD) Fund, and Alumni among others.

24. Best practices: Certain practices like strengthening library as an e-learning resource, IT infrastructure, interdisciplinary learning, introduction of add-on courses, creating corpus fund, involvement of alumni in Institutional development etc. be implemented for improving quality and excellence of HEIs.

Program of Action:

24.1. Introduction of Interdisciplinary courses; New innovative courses through SWAYAM program of MHRD.

24.2. Rationalization of land use of Institutions in town and cities with vertical expansion of infrastructure

24.3. Involvement of Alumni in their respective Institution for overall development of quality should be worked out to meet the changing needs.

24.4. To make the curriculum and teaching-learning process at par with the national level, introduction of Choice Based Credit System (CBCS) should be made compulsory for all UG and PG courses in the state as it will enable students to take courses of their choice, learn at their own place, undergo additional courses to acquire more than the required credits, and adapt an interdisciplinary approach to learning through a system of flexible credits for

fundamental, elective and core courses strictly following model UGC guidelines par with national level.

24.5. Courses should be so designed to promote interdisciplinary learning on cutting edges. More and more add-on non-credit courses be introduced like Communicative English, Basic Computer Education, Accounting Literacy, Health Management and General Studies. There should be more number elective courses under choice-based credit system.

24.6. Library should be used as a learning resource centre through full automation; Foot fall in the library be regularly audited. Members of the staff and students be trained to utilize the e-library system.

24.7. There should be a well-equipped computer centre in each HEI for 100 learners which in turn can be used for e-evaluation.

24.8. e-collection of all fees HEIs be introduced.

24.9. Introduction/strengthening of e-despatch in all HEIs be made compulsory.

24.10. Regular health check-up camps be organized in all HEIs.

24.11. Physical fitness through sports/Yoga camps be organized in HEIs..

24.12. Students be motivated to participate in greening and cleaning activities. 'Green Audit Cell' be created/activated to monitor the 'Go Green' programme; Proper institutional mechanism need to be evolved for the bio-waste, e-waste and garbage disposal. Greening and cleaning should be regularly taken up and there should be an annual subscription for the same.

24.13. 'Rain Water Harvesting' and 'Solar Light' provision be made in HEIs to minimize water and energy consumption.

24.14. All institution of higher learning should create a corpus/foundation fund and utilize the interest amount of the fund for instituting various medals and prizes for promoting excellence among students and teachers.

24.15. National Institutional Ranking Framework (NIRF) has been introduced by MHRD which evaluate each higher education institution on five broad parameters, namely teaching/learning resources, research, graduation, research outcomes, outreach/inclusive nature and public perception. Participation in the NIRF would help the educational institutions of the state in the world rankings with greater confidence, hence should be made mandatory for all the HE Institutions of the state.

24.16 There should be a regulatory framework for recognition of private professional institutions with minimum standards and requirements. The institution should be provided with a Letter of Intent against their proposal with a specific time limit to develop the basic infrastructure. The infrastructure can be verified and then the recognition of Govt. of Odisha should be accorded. No temporary recognition should be given to start an institution or programme.

24.17 If a professional institution has been granted with permanent recognition, it should not be subject to temporary recognition each time for introduction of a new course. However, the university can verify the requirements before granting permission to start the programme.

Table 1 : GER in Odisha across Districts by Social Group and Gender, 2014-15

District	Scheduled									Total Population		
	Scheduled Tribes			Castes			Others					
	M	F	P	M	F	P	M	F	P	M	F	P
Anugul	9.8	7.3	8.5	11.3	8.0	9.6	24.4	15.8	20.1	20.2	13.2	16.7
Balangir	9.6	5.6	7.6	12.3	9.0	10.7	13.2	8.8	11.0	12.3	8.2	10.3
Baleshwar	14.8	8.5	11.6	18.2	12.3	15.3	27.6	24.4	26.0	24.3	19.9	22.2
Bargarh	7.6	6.7	7.2	8.8	7.1	8.0	12.2	11.7	12.0	10.7	9.8	10.2
Baudh	13.1	3.5	8.2	8.8	3.4	6.1	12.2	4.8	8.4	11.6	4.3	7.9
Bhadrak	28.0	21.8	24.9	9.2	8.6	8.9	15.0	16.0	15.5	14.2	14.5	14.3
Cuttack	25.6	18.2	21.8	13.7	12.6	13.2	25.9	25.2	25.6	23.9	22.7	23.3
Debagarh	5.3	4.7	5.0	7.4	6.5	6.9	13.6	11.7	12.7	9.6	8.3	8.9
Dhenkanal	8.8	8.5	8.7	12.3	10.1	11.3	26.2	22.4	24.4	21.4	18.2	19.8
Gajapati	6.8	3.8	5.2	22.7	12.9	17.9	20.9	12.0	16.5	13.6	7.6	10.5
Ganjam	27.2	14.6	20.8	10.4	6.7	8.5	16.8	13.5	15.1	16.0	12.2	14.1
Jagatsinghapur	11.9	8.5	10.3	4.9	8.7	6.8	7.2	13.7	10.4	6.8	12.6	9.7
Jajapur	4.2	3.7	4.0	8.1	7.6	7.8	18.6	20.0	19.3	15.0	15.5	15.3
Jharsuguda	7.5	7.4	7.4	11.2	10.0	10.6	17.8	14.9	16.4	13.2	11.4	12.3
Kalahandi	6.4	2.9	4.6	12.4	7.3	9.8	11.6	7.5	9.6	10.4	6.2	8.3
Kandhamal	7.6	5.6	6.5	11.0	8.3	9.6	16.6	10.1	13.3	10.9	7.3	9.0
Kendrapara	18.0	23.8	21.0	8.2	11.2	9.7	14.2	18.3	16.3	13.1	16.9	15.0
Kendujhar	6.2	5.4	5.8	12.2	10.9	11.5	17.3	20.6	18.9	11.6	12.2	11.9
Khordha	72.5	57.8	65.4	46.7	31.0	38.9	86.9	54.5	71.4	81.8	51.8	67.3
Koraput	5.9	2.3	3.9	16.1	6.7	11.3	15.6	12.1	13.8	11.1	6.4	8.7
Malkangiri	2.5	1.4	1.9	5.5	4.3	4.9	10.2	8.7	9.4	4.9	3.4	4.1
Mayurbhanj	7.6	8.1	7.9	17.7	21.2	19.4	28.6	28.1	28.4	15.5	15.7	15.6
Nabarangapur	2.5	1.0	1.7	5.4	3.5	4.4	6.8	5.0	5.9	4.2	2.6	3.4
Nayagarh	7.9	6.7	7.3	9.2	7.2	8.3	14.3	14.5	14.4	13.4	13.1	13.2
Nuapada	5.5	2.5	3.9	12.3	6.1	9.1	8.4	4.1	6.3	8.0	3.8	5.9
Puri	102.0	91.2	97.2	11.3	13.6	12.5	19.0	22.9	20.9	18.1	21.5	19.8
Rayagada	7.8	3.2	5.3	24.0	8.8	16.2	49.5	19.9	34.9	23.4	8.8	15.8
Sambalpur	6.3	7.3	6.8	9.6	9.7	9.7	29.5	23.0	26.3	17.4	14.7	16.0
Subarnapur	11.9	10.5	11.2	9.2	7.5	8.4	12.5	11.5	12.0	11.6	10.4	11.0
Sundargarh	6.3	8.3	7.3	16.9	15.9	16.4	24.7	24.8	24.8	14.6	15.2	14.9
Odisha	8.5	6.6	7.5	13.1	10.3	11.7	24.1	20.0	22.1	18.9	15.2	17.1

Note and Source: Calculated using enrolment figures and population estimates at the state-level provided by All India Survey on Higher Education (AISHE), Ministry of Human Resource Development (MHRD), Government of India (GOI). The distribution of the state-level population (separately by gender for each social group) is as per the smoothed population for 15-20 year age group from the single-year age returns for Census 2011, as this age group would represent 18-23 years in 2014-15. The smoothing is a three-year moving average to address spikes in returns for years that are multiples of 5 and also for the year 18. These GER estimates are likely to be overestimates for two reasons: first, because MHRD state-level population estimate for 18-23 years is a declining trend that is not consistent with the single year age returns for 2011 and also not commensurate to the growth in population for the same age group based on returns for 2001; second, the enrolment figures are adjusted through a correction factor that assumes that institutes that did not provide information are likely to have enrolment similar to those that provided - while that would have been reasonable in the first year but in the fourth year of such an exercise that is a reflection of the institutes being inefficient and perhaps a signal that enrolments could be lower in such institutions. **M, F, and P denote Males, Females, and Persons, respectively.**

Table 2 : Additional Enrolment Provisioning Required for Higher Education in 2020: Estimates across Districts by Social Group and Gender

(in '000)

District	Scheduled									Total Population		
	Scheduled Tribes			Castes			Others			M	F	P
	M	F	P	M	F	P	M	F	P			
Anugul	3.1	3.3	6.4	3.4	3.7	7.0	3.0	6.2	9.2	9.4	13.2	22.6
Balangir	4.9	5.7	10.6	3.5	4.1	7.6	10.1	12.3	22.4	18.5	22.1	40.6
Baleshwar	4.0	4.8	8.8	5.0	6.4	11.4	3.6	6.1	9.8	12.6	17.3	30.0
Bargarh	4.0	4.3	8.3	3.8	4.0	7.8	7.9	7.5	15.4	15.7	15.8	31.5
Baudh	0.9	1.1	2.0	1.8	2.0	3.8	3.9	4.9	8.9	6.6	8.1	14.7
Bhadrak	0.3	0.3	0.6	5.2	5.2	10.4	11.3	9.8	21.1	16.7	15.3	32.0
Cuttack	0.8	1.2	1.9	5.0	5.1	10.0	1.7	2.1	3.8	7.5	8.3	15.8
Debagarh	2.1	2.0	4.1	0.8	0.8	1.6	1.6	1.5	3.1	4.5	4.4	8.9
Dhenkanal	2.6	2.8	5.5	2.9	3.1	6.0	1.2	2.3	3.5	6.7	8.3	14.9
Gajapati	6.1	6.7	12.9	0.2	0.5	0.7	1.5	2.5	4.0	7.9	9.6	17.5
Ganjam	1.0	1.8	2.8	10.3	11.8	22.1	24.1	28.8	53.0	35.4	42.5	77.9
Jagatsinghapur	0.2	0.1	0.3	3.7	3.0	6.7	10.5	6.7	17.2	14.3	9.9	24.2
Jajapur	3.2	3.0	6.3	6.2	6.1	12.3	7.8	5.9	13.7	17.3	15.0	32.3
Jharsuguda	2.4	2.5	4.9	1.1	1.2	2.3	1.7	2.1	3.8	5.2	5.8	11.0
Kalahandi	8.2	8.8	17.0	4.2	4.9	9.1	10.8	12.4	23.2	23.2	26.1	49.3
Kandhamal	7.5	7.9	15.4	1.8	1.8	3.6	2.5	3.0	5.5	11.7	12.7	24.5
Kendrapara	0.2	0.1	0.3	4.6	3.9	8.5	11.0	7.4	18.4	15.8	11.4	27.2
Kendujhar	14.9	14.5	29.5	2.3	2.5	4.9	5.8	4.0	9.8	23.1	21.1	44.2
Khordha	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Koraput	12.9	14.2	27.1	2.4	3.3	5.8	4.9	5.5	10.3	20.2	23.0	43.2
Malkangiri	7.3	7.4	14.7	2.5	2.6	5.1	1.7	1.7	3.5	11.6	11.7	23.3
Mayurbhanj	27.2	25.9	53.2	1.8	1.4	3.2	1.5	1.9	3.5	30.6	29.3	59.9
Nabarangapur	14.3	14.8	29.1	3.3	3.4	6.6	6.0	6.1	12.1	23.5	24.3	47.8
Nayagarh	0.9	1.1	2.0	1.9	2.0	3.9	7.4	6.6	14.0	10.2	9.6	19.8
Nuapada	3.9	4.3	8.1	1.1	1.3	2.5	4.7	5.3	10.0	9.7	10.9	20.6
Puri	0.0	0.0	0.0	4.1	3.5	7.5	8.4	4.6	13.0	12.3	7.9	20.3
Rayagada	10.1	11.2	21.2	1.2	2.3	3.5	0.0	1.8	0.0	8.7	15.3	23.9
Sambalpur	5.6	5.2	10.8	2.3	2.2	4.5	0.0	1.1	0.7	7.5	8.5	16.0
Subarnapur	0.7	0.8	1.5	2.1	2.2	4.4	3.9	4.0	7.9	6.7	7.0	13.7
Sundargarh	17.8	16.8	34.6	1.6	1.7	3.3	2.0	2.0	4.0	21.5	20.5	42.0
Odisha	167.1	172.8	339.8	90.3	96.0	186.2	160.6	166.2	326.9	418.0	435.0	852.9

Note: Calculated from estimated 18-23 years population for 2020 (three-year moving average of single year age returns for 9-14 years from 2011 census) when GER would be 30 and deduct from that the enrolment figures for 2014-15 (as a proxy for existing capacity). If the enrolment figures for 2014-15 is greater than 30 per cent of estimated population for 18-23 years in 2020 for any subgroup then we consider the additional provisioning required for that subgroup to zero.

Source: All India Survey on Higher Education (AISHE), Ministry of Human Resource Development (MOHRD), Government of India (GOI) and Census 2011.

M, F and P denote Males, Females, and Persons, respectively.

Annexure-I

The following recommendations of the Taskforce on Higher Education, 2010 were re-recommended by the Committee for implementation.

- i. Establishment of full fledged State Higher Education Council
- ii. Compete de-linking +2 from the ambit of Higher Education in all the academic institution of the state
- iii. Implementation of semester system and Choice Based Credit system in degree colleges .
- iv. To take steps to revise the University statute and accounts manual of the Universities and to fill-up of vacant teaching as well as supporting staff in all the Higher Educational institutions
- v. Instruction to have web-site in all the Higher Educational institutions (College and Universities) and whole campus Wi-Fi implementation.
- vi. To Setup of UGC model colleges in Low GER districts
- vii. Introduction of Skill and Vocational Education in colleges, and establishment of Community colleges and continuous learning.
- viii. Education Development Fund : For infrastructure development and to provide study loans
- ix. Training college Teachers on recent advances in the subject and updating the curricula from time to time as per the need.
- x. Rejuvenating Doctoral Programmes by implantation of State eligibility test, SLET and implementation of UGC 2009 guidelines for Registration to M.Phil. and Ph.D. degrees. For SLET a committee be formed at the state level who would conduct the examination and those qualified in these state level tests be eligible for registration to Ph.D. as well as for recruitment of faculty positions in colleges.
- xi. Management Information system (AIHSE) to be implemented strictly in all Higher Educational institutions and their accreditation through NAAC
- xii. Introduction of Physical education in all Colleges and Universities
- xiii. Establishment of E- library and e-resources in the Universities and colleges.
- xiv. Establishment of Quality assurance cell in all Higher educational institutions and annual monitoring of teaching, research and qualitative functioning of the Institution.

Annexure-II

The committee felt the necessity of a change in the following recommendations of the Task force on Higher Education, 2010.

- i. Opening of New state Universities and Branch campuses: Proposed new affiliating, 3 unitary and 5 more state Universities region wise; Metropolitan University, 3 Affiliating medical Universities, University for Management education, State open University, Institute for University and college teacher training, Institute of tribal art and culture, institute of textile technology are impracticable.
- ii. For attracting private Edupreneurs: A policy to be formulated and be established through Act in state Legislature, however, these should not be solely business oriented and should maintain the quality of education, which be periodically evaluated.
- iii. Set up Research Centres like IIT, NISER,IIIT etc also not necessary as all such institutions have come-up in Odisha.
- iv. From mineral resources to Human Resources: Private and public sectors using mineral resources to contribute for creating higher education institutions need not be included in policy but the resource can be tapped by the Higher educational institutions located in the region.
- v. Financial implication of the estimated 55,000 Crores over a period of 12 years also similar amount to generate from private sector projects as outlined by the Task force also needs revision to the amount as required for implementation of all the recommendations.
- vi. Five year Integrated courses (Astronomy, astrophysics, Earth system science, Geophysics, History of science, disaster management, Archaeology etc) also be to left to the Universities to implement as per the requirement of the region.
- vii. Unifying education and administration by bringing all departments, e.g. industry, HE, health and agriculture in one fold also seems impractical.
- viii. Rationalizing Service conditions and pay of the teachers is the biggest challenge and for such unification the quality as well as qualification should not be compromised. Mere counting the length of service ignoring their induction to the system through a proper interview mode would lead to further degradation of the quality teaching and research in the higher education institutions.

Annexure-III : Proforma

Yearly Assessment of performance of Teachers in Colleges and Universities of the state

I. Research and Academic Contributions

Published papers in journals Sl. No.	Title with page number	Journal Name	ISBN / ISSN/ Categorization	Whether peer-reviewed/ Impact	No. of Co-authors	Whether the main author/ Corresponding author
1						
2						

II. Full papers in Conference Proceedings/Chapters in Edited books

Sl. No.	Title with page number	Details of Proceeding/ Book with Editor (s) & Publisher	ISBN / ISSN / Categorization	Whether peer-reviewed	No. of Co-authors	Whether the main author/ Corresponding author
1						
2						

III. Books / Book-length translations Published as a Single Author / Editor

Category I Text/ Reference Books by International Publisher

Category II Text / Reference Books by National/Society/College Publ.

Category III Subject Books by Other / Local Recognized Publisher

Sl. No.	Title with page number	Category of the Book (I/II/III)	Publisher & ISBN / ISSN / Categorization	Title of the book	No. of Co-authors	Whether the main author
1						
2						

IV. Ongoing and Completed Research Projects and MOUs

Projects from External agencies (Govt./ Private/National/International): Title of the project, PI and Co-Investigator, Title of the project, Funding agency, Duration for the period from...to, Total amount sanctioned.

V. Research Guidance / Supervision

Sl. No.	Number Registered	Thesis Submitted	Degree awarded	Guide or Co-guide
M.Phil.				
Ph. D.				

VI. Guidance of project work of students at UG and PG level

Name of the student, Title of the project, pages, UG/PG project, Duration, Year

VII. Training Courses, Refresher Courses, Orientation Courses, Teaching-Learning-Evaluation Technology Programmes, Soft-Skill Development & Faculty Development Programmes (one week to one month duration)

Sl. No.	Programme	Duration (from...to....)	Organized by
1			
2			

VIII. Papers presented in Conferences, Seminars, Workshops, Symposia:

Sl. No.	Title of the Paper presented	Oral/Poster/Invited lecture/Plenary lecture/Chairing session	Title of Conference / Seminar/ Workshop	Organized by	Whether International / National / State / Regional / University / College level
1					
2					

IX. Field Out-reach/ Societal programmes under taken:

Area covered (Mention Village/Town/Block/District); Activity undertaken; Type of Beneficiaries; Duration with dates of the activities; Participation of the students and their number; Participation of beneficiaries in number.

X. Activities participated/Coordinated related to NCC/NSS/YOGA/Swachha Aabhiyan/Observation of National days in the college/ college functions with dates; Co-Curricular and Extra curricular activities assigned and undertaken in the college and the details there-of with dates of the activities.

XI. Number of Classes taken in (hours) and subjects taught: Theory/ Tutorial/Practical/ Proctorial assignment/ Skill work; Class wise and semester wise mentioning number of students enrolled in each class.

XII. Administrative work assigned by the College and coordination with the University including Board of Studies/Curriculum development/Examination: paper setting/ valuation and/or Viva-voce examinations and assigned work undertaken with dates:

Enclosures: [Enclose photocopies in support of the information given in above sections]

Date of joining in the college/University:

Previous service details in other colleges/Universities, if any:

Name and Address of the Teacher with email and contact number:

Signature of the Teacher

Date:

HOD/Principal: To confirm the information given by the teacher in section X to XII:

.....
.....

Forwarding Authority:

Signature of the Head of the Dept./ Principal/ Registrar

Place:

Date:

Comment on the Performance
by IQAC cell of the Concerned University:

.....

Overall assessment (Grade:A/B/C/D/E)
By Assessment Authority
& Comment, if any:

.....