

Two Lakh Plus,PlusFeedback on NEP (National Education Policy) of India

Adhikarla S Rao

Professor (Retired), Department of Biotechnology
Bharathidasan University,
Tiruchirappalli—620024
Tamil nadu (India)

Abstract

All the persons associated with the framing of the India's NEP (National Education Policy) are sincerely acknowledged for their eminence and commitment. To appraise a bulky document with numerous reforms and huge agenda in a single article is bound to have limitations. With 1.4 billion people and tremendous social heterogeneity differences of opinion are natural. Hence, readers are advised to spend time initially in going through the first three references to understand the magnitude of task and agenda and then go through the various links associated with different news media to have an idea of variation in responses. The present article appraises the issues from less appraised angles and suggests novel approaches to be successful. Instilling confidence and optimism and gaining collective support for the ultimate goals, some reforms which can be immediately and easily implemented have been mentioned. For successful accomplishment of goals few novel strategies have been suggested.

Key words: India, NEP (national education policy), reforms, school education, higher, education, teaching, research, administration, implementation, strategies.

1. Introduction and Background

1.1 At the outset author wish to state:

- a. The title has been so chosen as the government has admitted receiving more than two lakh feedbacks in response to the 484 pages Draft NEP after which the Revised NEP of 66 pages has been prepared and approved by the cabinet.
- b. Opinions have been expressed based on the study of Draft and Revised NEP, collective feedback of the three Indian Science Academies, nearly five decades of personal experience in various institutes in the country –both as a student & faculty,.
- c. Absolutely no bias. Opinions expressed lay emphasis from less appraised angles which are sincerely felt to contribute to the ultimate goals of realising the high accomplishments and nations welfare.
- d. Author sincerely acknowledges that the contributors to the policy are distinguished people in the country and they have made a monumental effort.
- e. Readers should understand that in this vast –highly populated -country of tremendous heterogeneity, anything said there will be people to support as well as oppose. Paradoxes and contrasting situations are not uncommon. For the same reasons any issue can become debatable and sensitive and interpretations can be genuinely different.

1.2. Old Maxim – Know Thyself

One should be conscious of the size & tremendous diversity of the country in various parameters –both in general society and in educational system/ institutions. India has a huge population –second largest to China—with approximately 1.4 billion (140 Crores) people. The population is projected to increase till the time dimensions given by the policy for achieving different goals. Though India has approximately 18% of the world's population it has only 2.4 % of world's geographical area and only 4% of world's water resources. Further, it is not just the total population but the tremendous heterogeneity also needs to be seriously reflected—Viz;22 official languages (on a currency note till now only 15 languages are mentioned) besides numerous dialects; 7 religions (with the population in each being highly variable) besides many faiths and cults. That Hinduism is a major religion is in a way fallacy keeping in view the huge number of denominations and sub-denominations which have differential implications for affirmative action. The total number of registered political parties registered are 2598, with 8 national parties, 52 state parties and 2538 unrecognized parties. The numbers /population vary in each of the above parameters and often superimposed with another parameter .

The entire population is presently distributed among 28 states and 9 union territories, 739 districts and about 65 thousand villages (with some uninhabited). India has a large and diverse education system with 958 Universities which are further categorised as state, central, private and deemed to be Universities apart from about 40 thousand colleges and 1.5 million schools.

Keeping the above parameters in mind, future developments in Education and Science & Technology, expertise and manpower requirements, social reforms and administrative reforms –not only with respect to Education and Science & Technology but also otherwise in running the society and the country need to be made.

1.3. Organisation and Structure of Draft and Revised NEP (National Education Policy)

In contrast to the Draft NEP, 2019 of 484 pages the revised NEP ,2020 is just of 66 pages. The major differences which has led to a much smaller draft are: a) all parts from I to IV have been drastically condensed in revised NEP as follows: Part I (school education) from 153 to 32 plus pages; Part II (higher education) from 137 pages to 16 plus pages; Part III (additional key areas of focus) from 49 to 10 plus pages and Part IV (making it to happen) from 37 pages to just 2 plus pages.; b) long preamble of draft NEP -17 pages- is omitted . Instead an introduction of 3 plus pages is there; c) 15 appendices in draft NEP are omitted d) list of acronyms and abbreviations reduced from 6 pages to 2 plus pages; e) details of meetings held and list of eminent persons and other bodies consulted during draft NEP are omitted.

In view of the above readers are advised to read both the documents. An important passing mention in revised NEP is that of Covid situation leading to online education. Covid situation was not there during the framing of draft NEP.

1.4. Purpose of this Write-up

As mentioned above and in the title more than two lakh feedbacks were there to the government. In such a huge number naturally there will be many variations. Who are all those who have given the feedback and how they have expressed is not known. Two lakh plus feedbacks is not available in the public domain but the concerned Ministry has expressed that “overall the feedbacks were positive “. In this context an important feedback quoted is the collective feedback of the three Indian Science Academies Viz; Indian national Science Academy (New Delhi), Indian Academy of Sciences (Bengaluru) and National Academy of Sciences (Allahabad).

The present write up tries to appraise from less appraised angles and lay emphasis to instil immense confidence in people at the earliest towards performance and accomplishments.

The draft NEP gives a list of 217 eminent persons apart from recognised different organisations and undoubtedly the chairman and the members of the committee are also eminent persons. However, what is puzzling is, members of the three different Indian Science Academies who have given the collective feedback are also eminent people. The contents of the 56 page collective feedback gives an impression that many associated with the academies were not consulted / could not participate in framing the draft NEP.

Just two examples. The lament of India not having a single world class university and hence the need and concept of world class university in fact was mooted in 1994. A proposal was submitted by an NRI scientist to the then PM of India to establish a NSU (National Science University) Unlike the draft NEP which aims to build many world class universities and which has so much of agenda, the NSU proposal deals with some of the existing problems and the need to establish as least one world class university. The proposal in essence (abridged version of the original proposal), was published and duly and honestly discussed by several eminent academicians across the country in “current science” journal published by Indian Academy of Sciences. Due credit to the calibre and commitment of the then editor in conducting the long debate.

Quoting a current situation as the second example. No one could anticipate that the farmers protests in the country would take such a serious turn attracting even international attention. Three new reforms were made in agriculture sector by the Government of India and the backlash started. The problem could not be solved even after two months of protests and many rounds of deliberations-as (situation as on 26th January, 2021). After 50 days of protest, to temporarily contain the protests Government declared to keep the three laws in abeyance for a period of one and half years. But this decision of the Government was not accepted and the farmers demanded withdrawal/roll back of the framed laws and continued the protest (situation as on 26th January, 2021). So imagine. If for three new reforms –in one sector—such unexpected consequences can arise how about numerous reforms proposed in NEP? Nothing can be easily predicted in the future.

It needs to be understood that education sector cannot be viewed in isolation but is very much linked with other sectors –Bureaucracy—Political—Business etc. So the entire onus cannot be on the people in the education sector.

2. School education

School education has been given lot of emphasis devoting a big bulk of the document. Few points to be reflected are:

- a) it would have been apt and useful if a reference is made to the best schools in the world and whether any of their practices are being contemplated. Just to mention a few, Finland, some European/Scandinavian countries and from Asia, Japan, Singapore, etc. Even US is ranked at 20th.
- b) When so much emphasis and onus on school teachers they do deserve salaries on par with many others. It is so in many European and American countries.
- c) After 10th (that is in the +4 bracket of 9-12) candidates should have an option to pull out to diversify. Further the point should be made clear that though exams will be conducted till 10th, there will be no detention of the candidates.
- d) Long back there was a proposal to encourage every village to start their own schools—at least up to primary level—and to be managed by the village itself. This proposal has the advantage of teachers being monitored, and parents/family members being close to children to look after. Particularly this system is beneficial in ECCE (early child care and education) . this proposal may be revived and formalised with due Government assistance.
- e) ‘‘Home work’’ burden should not be at home. Home work may be completed by the children right at the school. After the school periods are over they may be given a little play time and be back to do their home work right at the school. At home the home work may not be done by the children but by the parents /family members or tuition teachers. Let children be happy at home.
- f) In India where there are so many languages, it is a sensitive issue. Specialists in pedagogy used to say that the children’s grasp of elementary things/ basics/fundamentals is best, if taught in mother tongue at least up to 5th class. And up to 10th class also is recommended. Only later another language medium may be introduced. (As NEP stresses attracting foreign students English medium particularly in higher education is a must).
- g) Teacher absenteeism in schools has been mentioned even by international organisations. This problem is naturally severe in case the number of teachers employed in the school are negligible compared to the actual requirement. Absenteeism though highlighted only in schools it maybe there even in colleges and universities. In this context, it is also essential to distinguish between legitimate absenteeism and illegitimate absenteeism. Legitimately, a teacher can avail nearly 6 to 8 moths of holidays –cumulatively all categories of legitimate leave eligible. (there can be variation of 10-20 days across the states /institutions/government offices)) So the mandatory working days are much less. Further, the mandatory working hours per day also is less contributing to teachers poor accountability and output. Not to isolate the teachers/educational institutions, nearly six months legitimate leave can also be availed by administrative staff in all Government offices because of which general public are very much affected and not just the education sector. It is of immediate need to increase the mandatory working days and mandatory working hours per day.

3. No affiliation but Unitary universities

Document states of gradually removing the colleges affiliation system. Better to disaffiliate colleges at the earliest for better management and performance of universities—that is the main campuses. There are two possibilities. Colleges becoming autonomous to the extent of conferring degrees or getting affiliated to DCE (Directorate of College Education) with DCE being empowered to confer degrees. Former situation is better. States and centre accordingly assign funds. However, an important reform that is required in colleges. Presently professor post/cadre is not there in colleges except that of the principal who is considered on par with professor. Teachers in colleges also must be duly promoted to the level of Professor. Whole time teaching is as much a noble duty deserving to raise up to the level of professor. Further, in many colleges offering Masters degrees have a mandatory project work as well which adds to the work load.

4. Publishing Low Quality Papers Either in Paid or Unpaid Journals

A distinguished academician strongly said that the mandatory prescription of UGC (University Grants Commission, New Delhi) publishing at least one paper for getting a PhD Degree is responsible for the above mentioned . Hence, this prescription should not be there. It makes sense. Because of low funding and also because of candidates working on problems of local relevance it is not possible to publish papers in high quality journals. Even in low quality journals also candidates experience undue delays and therefore their degree is also delayed. Further, though UGC insist on only one, the number may vary across the institutes and the research supervisors.

In this context another point to be known is even high quality journals also are paid journals though not termed as predatory. Currently three reputed publishers have filed a court case in India demanding blocking of proxy servers to retrieve articles from journals. Following the above statement another distinguished academician said the same in a different manner. He said, let the chapters of the thesis be uploaded and make available online. In either of the cases, let the employer judge the candidates in the interview about the work done rather than insisting on papers either in quantity or quality. When there is no money even to conduct the minimum prescribed practicals/experiments as per the course curriculum where is the money for research work? Of course it is a paradox that huge number of candidates prefer for Higher education that too up to PhD in spite of unemployment and underemployment realities. A different paradox here is the policy makers feeling that their number is very less as a percentage of the total who entered higher education. Some were/ are of the opinion that bringing large number into higher education is a way of preventing social unrest. As employment opportunities are not there or meagre the youth need to be occupied in some manner and bringing them into higher education is a good way.

5. Merit Flowing in Other Directions

This problem has two dimensions. Very Good/Outstanding / Even Good do not prefer to come –by and large –to teaching/research profession. They go for high profile Central & State government administrative services, other Government Jobs, MBA's (Master of Business administration) Banks, Professional and Technical education like Doctors, Engineers, Computer professionals etc. Only left out will come for teaching and/or research. Of course this does not mean that none from the academic sector are capable of going into the above mentioned services. An interesting thing is, in fact –not all but a small number—do get a change in their mind set later. That is how even doctors, engineers, and PhD's do enter the above services. Among the rest some contribute to brain drain.

Even in higher education there are gross differences. The pay packages of even undergraduate students emerging from IIT's in the employment sector are lucrative and similarly so or more so after an MBA degree from IIM's. What does a teacher or a researcher in any institutes get Vis a Vis above!? So merit and efforts flows in other directions as above. Even remaining in teaching and research positions many try to occupy whatever administrative positions possible in their respective institutes thereby neglecting teaching and research. The terms –holistic-multidisciplinary- quality— makes sense for the candidates only if they are assured of some decent job after obtaining degrees. That is how they and their parents want education to be.

It should be realised that becoming a knowledge power and super power to reckon with and achieving self sufficiency requires merit flowing in higher and advanced education in different sectors. Hence, all incentives and manpower requirements must be highly rationalised.

6. Central (Federal) Versus States (the term Federal is used in US and other countries instead of Centre/central)

How Government wants to view Education –in particular Higher Education? If Government, the way it views the subjects of defence, atomic energy, space, railways, postal etc and are under central Government control, in case education also is viewed in the same manner then the subject of education also should be under central government. But it is not so and the subject is complex and varied. In US –considered as a super power/ knowledge power/ maximum Nobel Prizes (75% of the total Nobel Prizes) etc – Higher education is mostly independent from Federal government regulation and is highly decentralised. That is how it should be and that is what the 28 states of the country fondly desire. This is a vital point to be acknowledged and such freedom contribute a lot towards unity of the country. Leave all categories of education to the states. As a basic obligation of the Central Government it can give some basal grant to every state towards school & higher education without any tags.

But as mentioned above the subject is complex and varied. Central Government runs -if not parallel- a large higher education system. A natural consequence of this is states being seriously deprived of funds and consequently getting maligned of less output and performance. To give a rough idea, central government-broadly- runs 54 Central Universities, besides some deemed universities, 20 IIM's (Indian Institute of Management), 23 IIT's (Indian institutes of Technology), 16 AIIMS (All India Institute of Medical Sciences) with 8 more under development, 31 NIT's (National Institute of Technology), 7 IISER's (Indian Institute of Science, Education and Research). Large agricultural net work Under the apex body ICAR (Indian Council of Agricultural Research) with 65 research institutions besides 30 plus other centres and four Deemed universities and 38 research institutes under the apex body of CSIR (Council for Scientific and Industrial Research). These 38 institutes have been amalgamated into a degree conferring body AcSIR (Academy of Scientific & Innovative Research) resulting in a large flow of PhD students getting registered here. Even ICAR can think in the above manner. Alternatively both CSIR and ICAR can consolidate a certain number of institutes and create more number of central universities.

There are also many institutes under DST (Department of Science & technology), DBT (Department of biotechnology) etc . Apart from the above there are many institutes of eminence under the patronage of central government. So who can be expected to reach world class or get Nobel Prizes ? From the above types of institutes or state institutes?

The above process of expansion is not said to be completed. It is evident that from the time of initial establishment, the above categories of institutes over a period of time have increased. Every state in future would assert to get an institute of the above categories. So a future scenario can be, as many IIT's, IIM's, AIIMS, IISER's, central universities etc as many states and union territories As on today 28 states and 9 union territories. Even then it can be said as skewed distribution. Because the population of states vary a lot. If a state has one institute of the above category, another state with 5 times more population should have 5 times more number of institute of the above mentioned categories. That is how future assertion can be. In any case the above expansion is not yet completed.

In spite of large education network under central government the central government has made the subject of higher education for states as "concurrent" which means that states do not have full control of the higher education but should follow the mandates and requirements of the central government. In the context of the NEP this aspect apparently is more complicated. All states want heart in heart full control of higher education in their control and not under concurrent list. Any concurrency may be reduced to a bare minimum.

A crucial aspect for both central and states institutes is funding and its allocation under different items of budget. Once it was said that Indian army accounts for more than half of the total defence budget of India, with most of the expenditure going to the maintenance of cantonments, salaries and pensions instead of critical arms and ammunition. This statement is of relevance to higher education sector too. It is felt –in general –that the money allocated is sufficient at the most for salaries, maintenance and pensions with very little left for giving hands on experience to students and for carrying out quality research.

7. Concept of Multidisciplinary

The term "Multi disciplinary" is understood little differently by people. Presently is it not multi-disciplinary? Take any university or even a college -General, Professional or Technical –they all have so many departments and offer courses and/or degrees in many disciplines. In many of these there are departments of arts, humanities, general science apart from numerous departments/ subjects relevant to the concerned professional and technical programs. (Many institutes mentioned under the caption number "6" above) central have been categorised as multidisciplinary) What NEP says is to abolish the present professional and technical universities etc and bring the different faculties – agriculture, medicine, engineering, general science etc. –all under one roof. Well, historically speaking it was so for a long time. Medical college, engineering college, agricultural college etc along with general science and arts subjects were under one roof. At some point, the then eminent academicians and think tanks and naturally with government consent, separated the faculties and proposed specialised universities and that is how specialised universities like agricultural universities etc were carved out from their respective parental general Universities. Their vision is right and is still valid. Knowledge expanded so much and so the principle of "growth followed by division" had to take place. And this process continued and is still continuing and many are at it putting all their efforts for future. Their ambitions will be shattered if anything happens otherwise. When agricultural universities were separated they constituted veterinary/ animal sciences etc as a part of them. Subsequently, veterinary /animal sciences also got separated into an independent university in addition to separate universities for fisheries and horticulture. The above process is very much in the minds of so many and can go a long way. Theoretically there is a scope for so many more independent universities of the above mentioned categories to be carved out/formed In fact many are aspiring for that. Another important factor is the skewed distribution of the abovementioned universities across the country in the 28 states. Neither population of the states nor number of agro-climatic zones seems to have any correlation with the number of above mentioned universities currently existing. Further, there are specific universities for law, medicine, languages etc. Hence, many states are thinking in this direction.

Hence, each apex body related to professional and technical education like ICAR, ICMR/ MCI/ AICTE / VCI/ BCI etc should come out with separate policy documents of at least 30-40 pages. In view of their importance definitely many reforms and suggestions will be required. Take the task of feeding 140 crore people –still growing-. Naturally the policy of agriculture and animal husbandry requires a greater elaboration of its policies. Similarly health care for all the above. Hence, there is a need to redraft the policies in professional and technical education and legal education etc. The present document is felt as making only a passing mention in view of the magnitude of the tasks of professional and technical education. Hence, each apex body related to professional and technical education mentioned above should come out with separate policy documents of at least 30-40 pages.

In view of their cardinal importance definitely a detailed separate document is required. BCI (Bar Council of India) has been mentioned because millions of cases are pending for a long time in courts at different levels. Hence, the noble concept of “Justice delayed is Justice denied” cannot be followed in spirit. Hence, it needs to be reflected as to how this situation can be alleviated.

There can be drawbacks in the concept of multidisciplinary as per NEP. To have disciplines A to Z under a single roof as per NEP, is not probably advisable as it is quite some time since specialised universities are running. Further, students law and order problems, friction and rivalries among faculty and cut throat competition for the administrative posts are likely to be serious apart from the task of management. distribution of funds etc Such a size is unwieldy. Further, it is felt by and large and even by all, that the boss(es) of professional and technical education should be from their respective professions and disciplines.

8. over emphasis on research and neglect of teaching

Teachers even those who are capable teaching are grossly ignoring teaching in view of it not being considered for any evaluation and recognition but everything is decided on the basis of research credentials. Rolling out students with no depth in the knowledge of the subject in which they are specialising do not deliver the goods either for teaching or for research. Moreover there is something like an inner aptitude for a person. Say, after MBBS-basic degree for becoming a doctor – not all opt to become practicing surgeons! In the same manner not all opt or need to opt for research. Many may opt for teaching. What is wrong in some opting for whole time teaching? And teaching also is cardinal and indispensable. So no point in relegating teaching or those devoted to teaching for their assessment. Students should get an adequate exposure to the course work for adequate number of semesters. Without having a disciplinary depth expecting them to become great academicians in future is illusive.

Colleges should give disciplinary depth and good hands on experience in the practical syllabus as per the curriculum. In fact this is one of the primary aims and responsibilities in universities as well, apart from research. Accordingly, workload need to be optimized and candidates assessed. Emphasizing so much on research without any depth of knowledge in the concerned subject cannot produce any creative individuals. Without disciplinary depth what big breakthroughs and innovations they are going to make in future? Gross neglect of teaching is the main culprit of low quality of teaching and rolling out of students with poor knowledge in the concerned subject. And this gross neglect is because of teaching activity not being duly regarded and rewarded. Long back I read in “Nature” journal (unfortunately unable to trace the reference) a faculty was removed from the services for grossly neglecting the primary responsibility of teaching and getting himself preoccupied with embellishing his curriculum vitae. This has brought disrepute to the institution and he was dismissed from the services. That is how it should be, What to tell in case if the person has neglected teaching and also doesn't / cannot have quality research either ??

9. World Class Universities

NEP aims at building many world class institutes. What is important is to achieve this ambition. Hence, a different thinking is required for this ambition to be achieved at least to some extent and at an earlier date. Is it possible for us to excel the existing top ranking Universities in the world in Europe North America etc or the Ivy League ?? If not to excel them at least to raise the present standard to high levels at an early date and become institutes of greater global recognition, a promising strategy is to privatize the present institutes which have already acquired sufficient reputation, infrastructure and possess eminent faculty. Reputed private entrepreneurs /corporate may be given this task who will definitely further raise their standards to make them achieve goals faster, more innovative and useful to the nation and even for the world for a long time to come. They can definitely ensure greater recognition to these institutions and financial revenues. It is these institutes under the dynamic leadership of private entrepreneurs can become world class and compete with world class or become on par with Ivy league. The chances of them making both useful and exciting discoveries and also getting Nobel prize (s) either for individuals or organisation also will be enhanced. Government should privatize as many as possible. Private people would also offer them a much better deal as they represent a potential for high returns in future working towards their goals.

10. Medical education

As per Ramkumar and Ranbir Pal (2018), India has achieved W.H.O recommended Doctor; population ration of 1:1000 . India in addition to modern medicine has a large net work of alternative and complimentary medicine which has finally led to the establishment of a separate Ministry –AYUSH- (Ayurveda, Unani, Siddha, Homeopathy). But at least six states have supposed to have even exceeded the W.H.O recommended ratio even when Doctors in modern medicine (Allopathy) alone are considered. One or two states have not just achieved the W.H.O recommended ratio but even have even reached a doctor population ratio on par with Scandinavian countries.

If Doctors form AYUSH are included the overall ration would become little less, around 0.77. So obviously it is a case of skewed distribution of medical education and practicing. Hence, further expansion in medical education should address these skewed distribution and also the desired ambition –that is to say whether India is satisfied with W.H.O recommended ration or it wants to be on par with Scandinavian countries. There is no dearth of candidates aspiring to become doctors. However, manpower planning is required here too because of specialisations. Information pertaining to doctors possessing a PG Degree after M.B.B.S –MD (Doctor of medicine) / MS (Master of surgery) as in India – is not available along with their specialisations. This is an era of specialities and super-specialities. Two important points in this regard are: Many do not want to go to Doctor who has just an M.B.B.S qualification. They want to go only to those doctors who has the advanced Post-graduate qualification. In such cases W.H.O recommended ratio is not sufficient as everyone after M.B.B.S is a qualified doctor and it is these numbers that have been taken into consideration. Secondly, in the country overall and in every region of the country the type and frequency of ailments may vary. Accordingly, there is a need for the required number of doctors possessing advanced Post graduate qualification in specific disciplines. This planning needs to be done. There is a severe problem for the doctors in getting into advanced post-graduate courses and that too in their choice of field. Apparently there is a shortage in this regard.

Regarding the quality /improvement of quality there is definitely something to mention. In countries like US the total duration of medical degree/education is much longer than in India. (In India, after 12 years of schooling within another 5.5 years a candidate can become a doctor). Hence, there is a need to seriously reflect on this issue of increasing the duration of medical education. This can be done by admitting the candidates to medical degree after two years of duly designed bachelors training. Further, the residential period of being a House surgeon may be increased by an year. Problem of Skewed or even highly skewed rural –semi urban-urban distribution of doctors needs to be addressed.

11. Well begun is half done --What the government should do to gain confidence and instill optimism immediately/ at the earliest?

11.1 NEP has come with numerous reforms. For the Government to get a strong backing from all target groups there is a need to gain confidence and instill optimism immediately/ at the earliest and make the people highly motivated. Following are some measures:

- a) Uniform pay scales for all –School-College-Universities-research Institutes. When so much emphasis is given for school education it is only fair that school teachers too get a good deal on par with others. This point has been mentioned above as well.
- b) Uniform retirement age for all. Presently the retirement age varies from 58 to 65 years in different institutes across the country. This is highly unfair.
- c) Pension system which was there for a long time was replaced by another system. Former pension system should be restored or an option be given to the teachers/ faculty. The length of service required for getting full pension should be as minimum as possible and should be uniform everywhere.
- d) Rules for availing sabbatical leave vary widely. Should be made fair and uniform.
- e) Complete freedom to the Principal Investigator (PI) to operate the research grants. PI should be answerable only to the fund granting agency. Respective institutes administration should not interfere in the operation.
- f) Document discusses about large number of vacancies and shortage in schools and also in institutions at other levels. These vacancies may be filled at the earliest. However, central government should realize that states cannot afford to fund them and hence require due financial assistance.
- g) To what extent administrative procedures can be simplified at the earliest must be done.
- h) It is essential that funding agencies have a complete coordination. Each funding agency should have access to all details of each and every other funding agency with respect to who all are funded and to what to extent and proposal details. Only then a funding agency can be more rational in funding. These details should also be available on the public domain.
- i) It is a matter of common knowledge that many costly equipment remain highly underutilized. Funding agencies do not keep a track of it and multiple pieces of the same equipment are often sanctioned. Hence, there is a need for “central instrumentation cell” in every institute with duly appointed staff to take care of. Even if one PI or two have a particular equipment this does not serve the requirements of the huge number of students. Moreover students require a variety of equipment. This facility is of utmost need.
- j) Construction of at least one smart class room in every department of every institute and provision of mikes in other ordinary class rooms.
- k) Recently some publishers have filed a case against the use of Proxy servers to retrieve articles published in their journals. Government has responded by saying that it would follow ‘One nation one subscription policy’ and make

all journals available to all institutes in the country. This process may be accelerated. Further, to purchase enough copies of standard text books of foreign authors/publishers enough funds may be provided to the libraries.

- l) Regards and Rewards to everyone who is wholly involved in either teaching or research. If partly involved, due credit should be given to teaching component as well. Work load should be duly optimized
- m) All relevant information must be made available on the public domain.

All the above mentioned can be easily done at the earliest. This will make all the state governments and all other target groups to support NEP and participate in its further implementation. And they will also enthusiastically participate in other policies of the government as well.

11.2. Further Expansion

The NEP has come out with numerous reforms and great ambitions. Undoubtedly, further large expansion in education is required as visualised by NEP. Even in 2010 a government official spoke about the need of additional 800-1000 universities and 35, 000 colleges for that decade. It seems a Chief Minister of a particular state –more than three decades back before the erstwhile education policy of 1986 spoke about “one university in every district”. The purpose of mentioning the above is to acknowledge the fact that further expansion in education system is required for the large population. In view of many reforms and a different organisation visualised in NEP the further requirement it needs to be assessed. After fulfilling what is mentioned above “a to m” as a topmost priority, the new vision of NEP may first be implemented in the newly emerging central institutes Then the new vision of NEP be implemented in the existing central institutes. This will take quite some time Afterwards states may be focussed.

11.3 Making the geographical units manageable and fulfilling the public aspirations

Education can be better administered and implemented as envisioned by the NEP and even otherwise if more states are created. USA with just a quarter of India’s population has 50 states and Canada with just 3.7 crore population has 10 states and 3 territories. Indian with 1.4 billion people has only 28 states and 9 union territories. This angle needs to be seriously reflected. It will also fulfill the aspirations of many sections of the people and favors power and responsibility decentralization /devolution etc and the size of the unit would not be unwieldy at all and easily manageable.

11.4. Making manpower and administration efficient, transparent and credible

Kudos to the Chairman of the draft NEP 2019, who was honest, bold and exhibited practical wisdom by making two vital statements right in the beginning a) a complete paragraph has been mentioned about the rampant corruption and its adverse consequences. In the document specifically and feedbacks specifically it has been mentioned with reference to school education/teacher education and medical education. However, it should be realized –rather it is already realized—that corruption is very much there and may be even more in sectors other than academic. In the corruption perception index, India has been ranked 80th among 180 countries in the world. Even UN (united nations) documents while stating that corruption and population are two evils of democracy they mentioned India along with other countries. The popular expression –from cradle to grave—is often used in this context. Academic sector cannot be isolated or remain unaffected. Hence, reforms are required in other sectors too. Document discusses about overhauling/ revamping / restructuring etc. These are very much required in the administrative system –not just related to education sector but general administration concerned with the general public b) another vital statement which chairman has made is by quoting Dr. Ambedkar who has framed the Indian constitution. Quite apt. No reforms will work if people executing them are fair and capable and even if there is any lacuna in the reforms system will still be protected if those who execute are fair and capable. So it boils down to getting such people into all sectors.

12. Conclusions

Commendable that Indian Government has given a lot of focus on the foundation – that is school education. However, for the country to become a knowledge power and a super power to reckon with in future, excellence in higher education and advanced education is indispensable. Hence, the existing apex bodies related to various higher education sectors should critically think and elaborate their policies. Neglecting teaching and those involved in teaching –at all levels of education—is highly counterproductive to the ultimate goals. For the desire to excel or even to be on par with world class institutes some lateral thinking and novel strategies are required. It is essential to boost the morale and instill confidence among –academic fraternity (at all levels)-general public-state governments- for working collectively for a long time to come to accomplish the high ambitions. In this context some immediate steps need to be taken and those which can be taken easily have been mentioned.

13. References

13.1. Main documents

Draft national Education Policy 2019 --

https://www.education.gov.in/sites/upload_files/mhrd/files/Draft_NEP_2019_EN_Revised.pdf -484 pages (all inclusive)

National Education Policy 2020 ---

https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf - 66 pages (all inclusive)

Observations on the Draft of national Education Policy-2019. Indian National science Academy (New Delhi) , Indian Academy of Sciences (Bengaluru) and national academy of Sciences, India (Allahabad)

<http://www.dialogue.ias.ac.in/article/20944/observations-on-the-draft-national-education-policy> (56 pages)

NEP : More than 2 lakh feedbacks received so far. <http://www.uniindia.com/news/parliament/nep-more-than-2-lakh-suggestions-received-so-far/1796685.html> 2019. November 21, Reposted January 12, 2021, United news of India.

13.2 References for additional reading

(Two lakh plus feedbacks received by the government cannot be quoted in links. However, many news channels were displaying online responses from different quarters. Even their number is too high and selective quoting would be misleading and biased. Hence, readers are advised to type the desired words of their choice in Google along with and without the following news channels to get an idea).

Business standard, business today collegdekho, deccan herald, economic times, financial express. Hindustan times, Indian express, India today, lieve mint, times of india, mastersportal, ndtv, news18, odishatv, PTI, the hindu, thehindubusinessline, uniinida, wikipedia, worldometers,