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August 8, 2018

Hon'ble Shri Prakash Javadekar Minister for Human Resource Development Government of India Shastri Bhavan Dr. Rajendra Prasad Marg, New Delhi - 110 001

Re. Suggestions of Indian Science Academies on UGC / Higher Education Commission Acts
Sir,

On June 27th, 2018, the Government of India formally declared its intention to replace the University Grants Commission (UGC) Act of 1956 by the Higher Education Commission of India (HECI) Act. The Science Academies (the Indian National Science Academy, New Delhi; the Indian Academy of Sciences, Bengaluru; and the National Academy of Sciences of India, Allahabad; Encl. 1) have carefully examined the UGC Act and the draft of the proposed HECI Act and conclude that the existing problems were not due to inadequacy of the UGC Act but have arisen due to deficiencies in its implementation. We also note that the principles leading to the HECI Act have not been clearly spelt out. Any change without due consultative process may prove detrimental to the trajectory of higher education in India.

Education in respect to its quality, its excellence and its reach to masses is cardinal to the socio-economic firmament of the country. Recognizing this paradigm, the three Science Academies pro-actively discussed various issues associated with it. Consultations across the country and views of the academic community suggest caution in replacing a reasonably functional system with a radically new one. The academies consider that appropriate corrective steps coupled with enhanced investment in funding can remove the current aberrations in the UGC system to

make it more contemporary and help achieve the desired levels of excellence. Observation, views, concerns and suggestions of the Academies are placed in the following for your kind perusal.

It is to be accepted that despite hurdles of various kinds including gross limitations of resources, India has fared reasonably well in Higher Education. Since its establishment the UGC has performed its role reasonably competently during the period when the number of universities increased from about 20 at the time of independence to about 800 at present. The success of internationally applauded major National programs on Space, Atomic Energy, Information Technology, Health, Agriculture, Social Sciences including Economics and Commerce have used the basic human resource derived from the existing university system.

Besides coping with the increased numbers, the UGC contributed towards improvements in the university system through several innovative initiatives such as the establishment of internationally acclaimed Inter-University Centers (IUCs), Centers for Advanced Studies (CAS), Departmental Special Assistance (DSA) programs, Committee for Strengthening of Infrastructure in S & T (COSIST) and the scheme of Universities with Potential for Excellence (UPE), to name a few. These programs helped improve the infrastructure and research facilities in numerous universities. Funding of major and minor research projects provided a research base to every teacher across the country. Several initiatives by the empowered committee on Basic Science Research (BSR), such as the D. S. Kothari Post-doctoral Fellowship program, BSR Student and Faculty Fellowships and the Faculty Recharge Program (FRP) have contributed significantly to the academic ecosystem.

While recognizing these successes, it is also to be acknowledged that an overall decline in the functioning of UGC has been perceptible over decades and that its present state leaves much to be desired. This decline however, arose not because of any imperfection in the UGC Act, but due largely to the failure of the UGC system to augment its governance structure to cope with rapidly expanding higher education coupled with inadequate funding which did not remain commensurate with the growth of higher education.

An important casualty, particularly at the state level, has been the erosion of functional autonomy of the universities which is vital for any education system. This, in turn, has led to suboptimal leveraging of India's demographic dividend. Autonomy and the flexibility to adjust to ever-changing contours of knowledge space now stand compromised. Some of the basic tenets laid down decades ago, by the Kothari Commission have been tampered with. Implementation of Academic Performance Index (API) and the attempt to develop model courses by the UGC in recent decades are some examples of actions that have proved counterproductive.

The proposed HECI Act leaves much to be desired in terms of its scope, appeal and implementability. A detailed analysis of the draft Act reveals that several of its components mimic the current UGC act and some others are either impractical or undesirable and their application will significantly compromise the growth of education in the coming decades.

Some major concerns are briefly mentioned below and the Academies request an opportunity to discuss these and others in more detail at any appropriate time.

- The constitution of the proposed HECI Act has grossly insufficient representation of educationists and academics of proven credentials. It is essential that any such Commission should predominantly comprise academics of proven credentials, without any bureaucratic control. The proposed constitution of HECI will move the education of future generations from the hands of educationists to those of bureaucrats.
- 2. Educational systems and academic schools take years to build. Therefore, the proposal to seek performance reports on an annual basis defies comprehension. The gargantuan nature of the tasks involved in achieving a reasonable evaluation of about 1000 institutions has perhaps not been appreciated. This number is expected to increase rapidly in the years to come, which makes the idea of annual reviews, a Mission Impossible.
- 3. While it is easy to withdraw licenses of institutions that underperform, it is difficult to imagine the fate of thousands of students who would suffer by such actions.
- 4. It is not clear how the performance indices will be translated into fund allocations. The dual instruments of academic performance evaluator and financing body will be detrimental to the system.
- 5. The proposal to penalize the administrators of institutions under the Indian Penal Code for their failure to achieve an undefined performance level will not be conducive to an academic environment. On the other hand, a proactive policy of encouragement to the performers will be more productive.

India and its people are at critical cross roads. India's objective of providing better lives and employment to its billions and the success of enabling programs like *Swatch Bharat, Swastha Bharat, Make in India, Start up India*, would need the best of human resource that can be generated only through the university system, now and in real time. The proposal for HECI would imply substantive delays and confusions, which the country can ill afford at this critical juncture.

It is therefore, the considered opinion of the Academies that the existing UGC system be strengthened by ensuring that the UGC Act and the academic autonomy of higher education institutions are implemented in letter and spirit. Functional autonomy buttressed with generous and optimal funding and its timely release will facilitate administrative and regulatory procedures that would ensure excellence in education.

Further, any organizational set up in the country has to encourage the youth so that they appreciate the value of higher education for their growth. The quality of infrastructure and development of international interfaces with experts will be critical for the socio-economic agenda of the country.

Academic institutions should not be construed as government departments but as centers of creativity, which are assured of flexibility in administration and ease in the release and use of finances in real time.

It may be appropriate here to recall the sage statements of Homi Bhabha and C.V. Raman. In a letter of Shri J. R. D. Tata on 19 August 1943, Homi Bhabha wrote

"The four years I have spent since my return from Cambridge have convinced me that the lack of proper conditions and intelligent financial support hampers the development of science in India at the pace which the talent in the country would warrant".

These words still hold true.

Nobel Laureate, Prof. C. V. Raman said in 1942,

"If you ask me what is the greatest industry of a Nation - the key industry - I have no hesitation in saying that it is the production and diffusion of knowledge. There is no nobler work for a man or an institution than to bring up a young generation in health and strength and in the vigor of intellectual and physical activity."

We also recall here a statement by R. Enarson,

"The universities are a very special place. They are fragile as truth itself is fragile. They exist by public sufferance, and it is a marvel that the public at large supports it with its dollars an institution that is independent, free-standing, openly critical of the conventional wisdom, enchanted with controversy and hospitable to those 'who think otherwise'. May it always be so "(Science 181, 897, 1973).

In conclusion, the Science Academies, jointly and, without any exception, recommend that every effort be made to retain and strengthen the UGC with full functional autonomy and with substantial augmentation of finances. This will be the only way, the Indian Education System can continue to prosper and remain competitive, internationally.

The Science Academies would be willing to work with the MHRD and provide concrete suggestions on the recalibration of the UGC system with a futuristic outlook, whenever called upon.

With regards,

A. Kakodkar President, NASI R. Ramaswamy President, IASc A. K. Sood President, INSA

Cc:

Prof. K. Vijayaraghavan, FRS Principal Scientific Advisor, Government of India

The Indian Academies

The Indian National Science Academy (INSA), Indian Academy of Sciences (IASc) and the National Academy of Sciences of India (NASc) represent the most accomplished intellectual pool of the country with an illustrious record of substantive contribution to Indian Science. With a combined strength of over 2500 Honorary Fellows, the academies have been extensively contributing to the entire canvass of Indian science, ranging from the promotion of science and developing scientific temper; the human resource development; in developing policy paradigms and towards the broader goal of harnessing scientific knowledge for societal good.

Formed over eight decades ago, and funded by the Government of India, the three academies, work in a complimentary and synergistic mode towards providing an interface between the government, academia and the public. Thus the academies been informing and developing Policy Prescriptions (through publications and statements), Nurturing Science and Education in their broadest sense, and contributing substantively to the Quality Human Resource Development in the country through various programs.

Besides its other activities, **the INSA**, carries an additional role **mandated to it by the Government of India**, towards representing it, in all international fora. For over 5 decades INSA has been carrying this task with due diligence and through a pan-Indian consultative process, which has ensured Indian presence in the international science at a meaningful and decision making level. In the process it has developed several initiatives that help Human Resource Development in India. INSA has also played a major and a globally applauded role in developing the discipline of *History of Science*. Further, well researched publications of INSA like, *Higher Education in Science*, *Health of Science in India*, *State of Indian Universities*, *Restructuring Post School Science Education*, the book on **Ethics in the Use of Animals for Scientific Research** have provided the policy planners the perspectives from the academics.

The IASc, besides its other activities likewise, has excelled in developing publication of Scientific Research in India and has provided a direction to quality publications from India. The Current Science published by the Current Science Association and managed by the fellows of the Academy, has an international appeal, with at least over half a million readers over the world. Subject journals published by IASc have an international reputation with a combined subscription running into tens of thousands.

The NASI, has been carrying out yeomen service in the area of Science outreach and Education, with the objective of developing scientific enquiry and temper in the

society for cultural improvement through human knowledge. The Academy undertakes numerous "science-society" programs to ensure that science does not remain confined to laboratories.

Major joint activities of the three academies include:

- 1. Joint Science Education program (aimed at UG/ PG students and their mentors) with a total of 4 thousands and teachers, benefit from these programs annually.
- 2. Women in Science in India program, aimed at attracting and empowering a woman scientist and achieving gender equality
- 3. Ethical Conduct of Science in India aimed at betterment of scientific standards and moral values amongst active researchers and their mentors.

In additional, the academies have a strong synergistic and consultative process for opinions on issues of contemporary national interests and therefore most inputs to the Government are provided jointly.