

Editorial

Plant Pathology and the New Education Policy: a few thoughts

The New Education Policy of the Government of India envisages to provide universal access to quality education in line with the Sustainable Developmental Goal 4 of the United Nations. The policy targets collaborative research to find tenable solutions to manage infectious diseases and hence the subject of Plant Pathology comes in to direct relevance, more so in the context of domestic and international quarantine. The policy focuses on Teacher as the centre of reforms, which certainly is a need for the subject of Plant Pathology given the span and depth of the science that it requires to deal with in the present times. Hence, an obvious issue relates to recruiting the best and the brightest to the profession of teaching Plant Pathology in order to sustain and improve the science it deals with. Recruitment of quality teachers lays a durable foundation of education, which requires to be largely free of influence peddling by special interests. Further, high quality teachers produce extra-ordinary students and the process repeats itself, whereby the bar is always raised further. Recruitment of teachers who lack imagination and creativity has a lasting impact on any society. The point needs to be seen both in the National and global contexts vis-à-vis the standard of teaching now available in India and that in the western world. Overall the policy involves a paradigm shift in the Nation's education system. The structural framework of the new policy is to be headed by a Central Advisory Board of Education (CABE) through the Higher Education Commission of India (HECI).

The National Higher Education Regulatory Council (NHERC) is planned to regulate the financial aspects, governance, audits, infrastructure development, staff and courses in a 'light but tight' manner, which could surely be addressed through autonomy, good control and empowerment. The National Accreditation Council (NAC) is intended to function as the meta-accreditation body. Funding and financing of higher education are to be regulated by the Higher Education Grants Council (HEGC). The General Education Council (GEC) is strategized to set academic standard, frame expression and outcome of higher education, formulate NHEQF (National Higher Education Qualification Framework) to describe degrees and qualifications in sync with the National Skill Qualification Framework (NSQF). Thus, the GEC (including the Indian Council of Agricultural Research) shall require to set norms for credit transfer, etc. as also specify skills for students in academic programs through the NHEQF. Hence, future system may warrant stringency in transfer of credits to suit the needs of any degree program in Plant Pathology while inculcating more of research-based studies in the course curriculum. The demands of the new policy to shift towards open distance learning could be rather a difficult proposition to meet given the fact that the subject of Plant Pathology is more oriented towards hands-on training and development of skills through practice.

The slated policy and the structural framework needs to be viewed in the light of the challenges being faced by today's graduates. The readers of this article are all witness to the stiff competition being faced by the graduates of present times as a result of increase in population as also due to the masses being more techno-savvy. Further, there is a clear lack of innovativeness among the pass-outs as the curriculum is not adequately preparing the graduates to address the emerging needs. Moreover, the system is not producing too many leaders in the field of Plant Pathology. Basically the system is creating followers or technically skilled work force who are reactive and not pro-active. Such work-force lacking in analytical ability is often failing to create jobs. The mere degree holders are aiming at Government resources which is gradually but surely dwindling. With the passage of time, uncertainty would be more rampant. Thus, the most critical challenge of the present is to prepare a work force readily adaptable to the changing social scenario. In this backdrop, whether the new policy could meet the need of the hour remains a major question.

A very vital aspect of the new policy is the multi-disciplinary and holistic mode of education. Practitioners who are involved in the profession of Plant Pathology would duly appreciate that Plant Pathology is truly a multi-disciplinary science that has evolved and continues to do so with passage of time. Today, a professional Plant Pathologist just cannot be complacent with a few good publications and needs to target products and patents to survive through the intense competition, which in turn brings in the added advantages of multi-disciplinary approach. The professionals of today need to be familiar with the basic concepts of varied branches of science to ensure that the targeted product caters to the demand of the changing time in all possible aspects. The professional today needs to have a flexible mind, i.e., willingness to adopt ideas from a wide diversity of sub-disciplines, research areas, interactions, etc.; this should be duly coupled with contribution of enterprising and encouraging research managers to shape young and promising career paths through collaborations in science (Burdon, 2019). Thus, the new policy presents a major opportunity before the Nation to develop Extension in Plant Pathology through creating Public-Private-Producers Partnerships (Markell et al., 2020) as is already in practice in a few other countries and has also started tasting success in India through some Farmer Producer Organizations, non-governmental organizations, etc.

The publications that are usually by-products of the research for arriving at an artefact evidently are published in high-rated journals of general science that also remain well cited. Hence, the aspect of meeting creativity and critical thinking to encourage logical decision-making with innovation as a target of the new policy has to be met by the present-day Plant Pathologists. The issues of conceptual understanding could always be ascertained through appropriate and rigorous assessment in the comprehensive and analytical tests that too are in vogue in the present set of course curriculum of Plant Pathology, provided the standards are not compromised in any way. On the whole, the system of education in Plant Pathology in India and world over is multi-disciplinary in style to act as an exemplary hub for other related disciplines on spokes to follow suit.

The new policy also includes respect for diversity and for local context, which could always be interspersed in to the elements of learning in the class; teaching in effect need to be in the milieu of real-life requirements to ensure that the pass-outs have the desired level of critical flexible thinking and writing skills for readiness to serve as good teachers and researchers. Apparently, there is a tremendous need for continuous review of the changing situation that could be addressed through sizeable outlay in both financial and manpower aspects in a robust, vibrant public education structure to strengthen the existing arrangement.

The novel plan also speaks of an increase in Gross Enrolment Ratio, which could be difficult to follow without compromising excellence in teaching standards. Today, the high ranking and premier academic institutions related to Plant Pathology are possibly able to maintain a respectable standard as they maintain quality following a very low teacher: student ratio. Thus, there is need to exercise utmost caution through critical error-free assessment of the 66-page document of the policy for both the words and silences so that during implementation of the same it does not turn regressive or deleterious and the Nation is actually able to champion only excellence. The policy also warrants regular evaluation in a phased manner through provision for corrections and return to earlier track if the plan is wrongly implemented or does not work out well. One needs to appreciate that the work force created by the National Research and Education System of today actually serves the Nation tomorrow. Thus, the choice of any system that is picked for action would be a critical determinant of how strong or weak the structure would be in the coming times. In this regard, intellectuals (professional societies, academies) as powerhouses of knowledge need to provide proper prescription to policy makers about do's and don'ts to enable avoid pitfalls.

In the tide of global dynamism, change we must. The present scenario desires a more entrepreneurial mind set among the professional Plant Pathologists for a self-reliant Nation so that there could be a shift towards self-employment, from job-seeker to job-provider. The professionals in Plant Pathology have been flagging the need for agri-business in Crop Health Management since long. The present

policy on the plate seems to be an opportunity to enable such a cause. Global Green Economy, Knowledge Economy, Global Zero Hunger Challenge, Sustainable Development Goals, 2030, and International Agriculture and Development Challenge, 2050 are all very relevant to the present discussion and the Plant Pathologists need to join the chorus to meet the targets set by the National policy makers and the United Nations. The effort should necessarily be a journey of continuous perseverance to manifest the perfection already in Man in tune with the growing global demand for food, nutritional and livelihood security.

References

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