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## Opinions of faculty members on the ICAR common academic regulations and revised curricula at PG and Ph.D level

**Niranda Sharma Leihaothabam, Loukham Devrani, Wangshitula Longchar and Golla Ravi**

### Abstract

The National Education Policy 2020 (NEP), introduced by Indian Prime Minister Narendra Modi, includes a significant provision for the integration of agricultural education at the middle school level. This initiative, known as the National Agricultural Education Policy, is the first of its kind in India. Its main objective is to establish academic credit banks and degree programs, offering entry-exit options for universities specializing in crop sciences, fisheries, veterinary studies, dairy preparation, and research. Through the implementation of the National Agricultural Education Policy, students now have the opportunity to pursue their studies in agriculture and related fields by earning diplomas and advanced diplomas. They can then choose to continue their education at a later time and eventually earn a full-time college degree. The policy encompasses various types of universities, divided into four parts: a) Central Agricultural Universities – comprising three Universities, one each from Imphal, Samastipur and Jhansi, b) ICAR Deemed Universities – there are 4 Universities in this cadre, c) State Agricultural Universities – includes 63 Universities, d) Central University with Agriculture Faculty – comprises 4 Universities. The ICAR has constituted a National Core Group (NCG) for restructuring of Master's and Ph.D. curriculum, syllabi and academic regulations for the disciplines under agricultural sciences on the recommendations of the NCG, 19 Broad Subject Matter Area (BSMA) Committees. Through this study there were several recommendations from the faculty member, some of them were - Mid-term examination should be conducted for PhD students, so that they will be trained for writing answers within limited duration of examination which will be helpful for their future examinations. Comprehensive examination should be conducted to make the students fit for facing all competitive examinations. The recruitment of more faculty members in the specific subject area is very much required to improve exposure to students and upgrade the quality of teaching.

**Keywords:** Universities, National core, degree programs, offering

### Introduction

The Indian Prime Minister, Narendra Modi, had announced the introduction of agricultural education at middle school level in the National Education Policy 2020 (NEP). This National Agricultural Education Policy has been implemented as an effect of the same. It is the first of its kind project in India and aims at bringing academic credit banks and degree programs with entry-exit alternatives to Universities focused on crop sciences, fisheries, veterinary and dairy preparation and research. With the entry-exit options available, the National Agricultural Education Policy opens up the opportunity for students to continue with their diploma and advanced diploma as and when they are able to resume their studies and earn themselves a full-time college degree. The Universities which have been included as a part of the National Agricultural Education Policy have been divided into 4 parts:

- Central Agricultural Universities – comprising three Universities, one each from Imphal, Samastipur and Jhansi
- ICAR Deemed Universities – there are 4 Universities in this cadre
- State Agricultural Universities – includes 63 Universities
- Central University with Agriculture Faculty – comprises 4 Universities.

The curricula development is a part of the continued process and effort of the ICAR in this direction for dynamic improvement of national agricultural education system. The Council has appointed National Core Group and BSMA Committees for revision and restructuring of Post-graduate and Doctoral syllabi in consultation with all the stakeholders to meet the challenges and harness opportunities in various disciplines of agriculture and allied sciences. It has been observed that a paradigm shift is necessary in academic regulations to comply with various provisions of National Education Policy-2020. The ICAR has constituted a National Core Group (NCG) for restructuring of Master’s and Ph.D. curriculum, syllabi and academic regulations for the disciplines under agricultural sciences on the recommendations of the NCG, 19 Broad Subject Matter Area (BSMA) Committees. It is heartening to note that the respective Committees have taken due care by following flexible, multi-disciplinary and holistic approach while developing the syllabus and academic regulations. The students are given opportunities to select the courses to support their planned research activities, to register for online courses and to pursue internship for development of entrepreneurship during Masters’ programme. Further, the Teaching Assistantship has been introduced to provide experience to the Ph.D. scholars on teaching, evaluation and other related academic matters. This is an important part of doctoral training all over the world and it is expected to 3 address the shortage of faculty in many institutions/universities. By intensive discussion with the subject experts and based on the feedback from the faculty and students, the syllabus of Masters’ and Doctoral programs in 79 disciplines was restructured and new courses were introduced. The syllabus has been revised suitably with the view to equip the students to gain knowledge, enhance their employability and skill sets to mould towards entrepreneurship and build themselves to prepare for global competitiveness. The opinions and suggestions invited from the concerned institutions, eminent scientists and other stakeholders were also reviewed by the Committees. The revised syllabi encompass transformative changes by updating, augmenting, and revising course curricula and common academic regulations to achieve necessary quality and need-based agricultural education. Many existing courses were upgraded with addition and deletion as per the need of the present situation. The new courses have been incorporated based on their importance and need both at national and international level (1, 2).

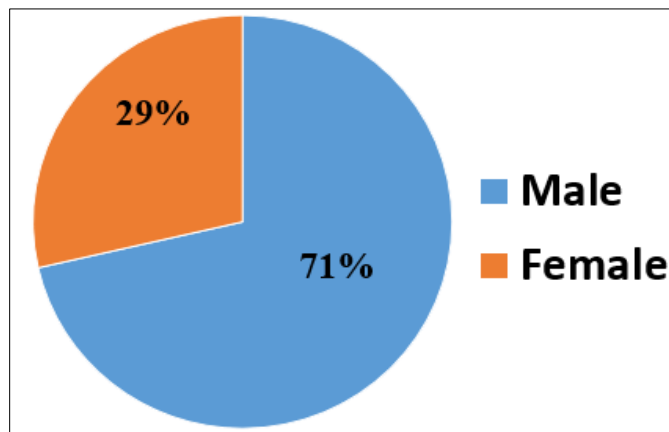
**Methodology**

Three Universities were selected purposely for the collection of data which are: a) Central Agricultural University Imphal, Manipur (CAU, I) b) Dr. Rajendra Prasad Central Agricultural University, Samastipur, Bihar (RPCAU) and c) Rani Lakshmbai Central Agricultural University, Jhansi, Uttar Pradesh (RLBCAU). These Universities were selected purposely as the programmes were conducted in these areas. Data was collected through complete enumeration of the participants through Google Form and MS word format according to the convenience of the faculty members. Thus, a total of 35 responses were received, documented and taken for data analysis: 30 respondents from CAU, Imphal, Manipur, 3 respondents from RPCAU, Samastipur, Bihar and 2 respondents from RLBCAU, Jhansi, Uttar Pradesh.

**Result and Discussion**

**1. Profile of the Respondents (Faculties)**

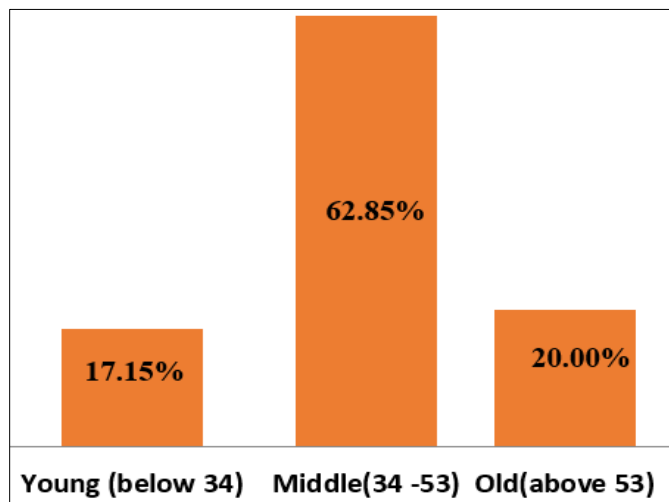
**1. Gender: n=35**



**Fig 1:** Distribution on the basis of Gender (Faculties)

It was found that majority of the respondents were male (71%) while the rest were females (29%).

**2. Age: n=35**



**Fig 2:** Distribution on the basis of Age (in years)

Most of the respondents (62.85%) in the study area were aged between 34 to 53 years. Around 20.00% belonged to the age group of 53 years of age and above and 17.15% belonged to 34 years of age and below.

**3. Specialization/ Discipline: n=35**

Most of the respondents (22.87%) in the study area belonged to the discipline of Ag. Extension followed by (11.43%) in Ag. Economics and Plant Pathology.

**4. Designation: n=35**

Most of the respondent (45.72%) in the study area was working as Assistant Professor. (31.43%) was Professor and was followed by (17.15%) Associate Professor.

**5. Teaching Experience: n=35**

In terms of teaching experience, around 65.72% of the faculties had medium teaching experience between 2 and 25 years, 17.39% of the faculties had high teaching experience of more than 25 years and 8.57% of the faculties had low teaching experience of less than 2 years.

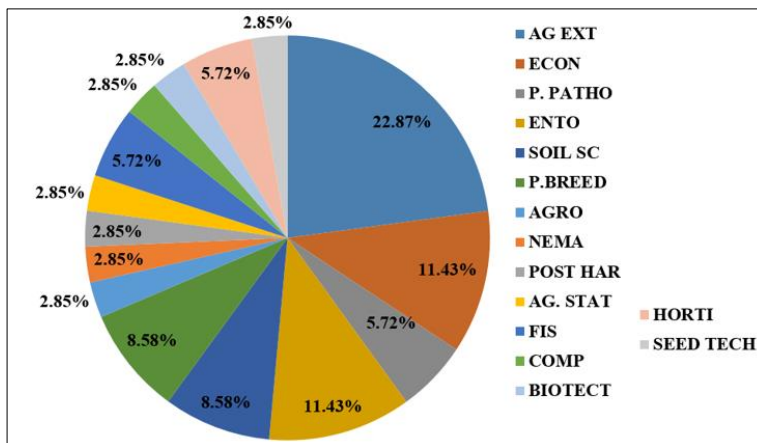


Fig 3: Distribution on thde basis of Specialization/ Discipline

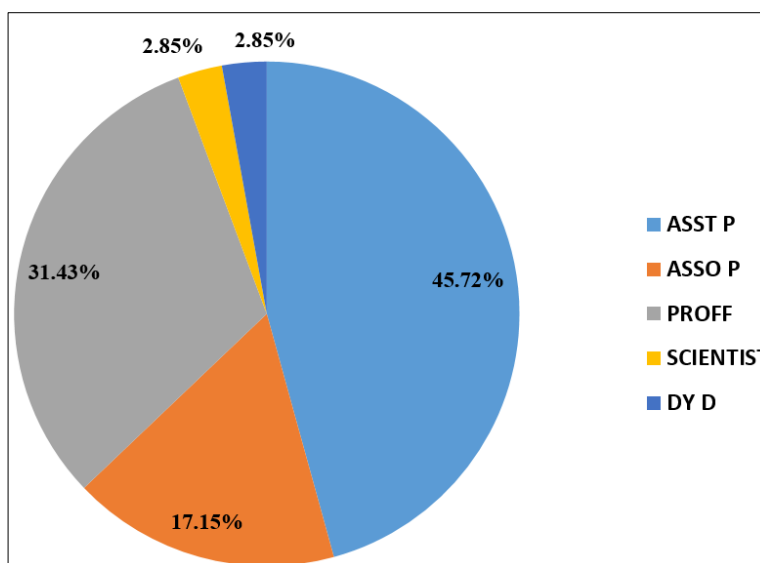


Fig 4: Distribution on the basis of Designation

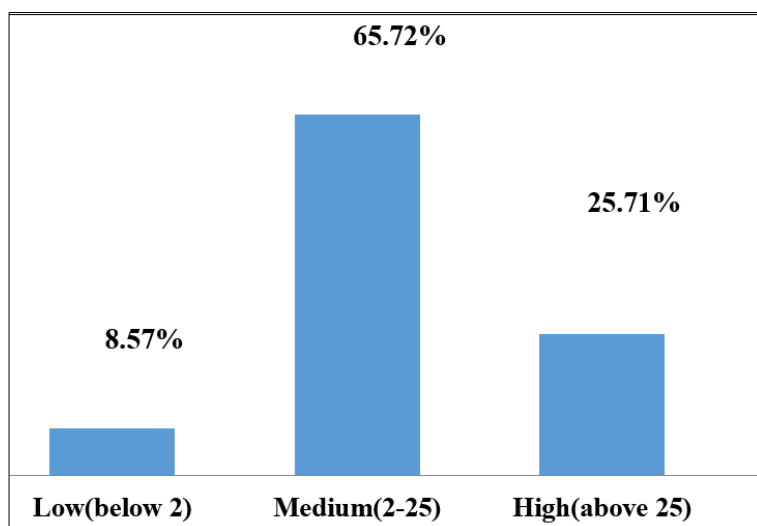


Fig 5: Distribution on the basis of Teaching Experience

**6. Experience in PG and Ph.D.: n=35**

In terms of teaching experience, around 65.72% of the faculties had medium teaching experience between 2 and 25 years, 17.39% of the faculties had high teaching experience of more than 25 years and 8.57% of the faculties had low teaching experience of less than 2 years.

**6. Experience in PG and Ph.D.: n=35**

In terms of experience in PG and Ph.D. around 62.85% of the faculties had medium experience between 2 and 18 years, 28.58% of the faculties had high experience of more than 18 years and 8.57% of the faculties had low experience of less than 2 years.

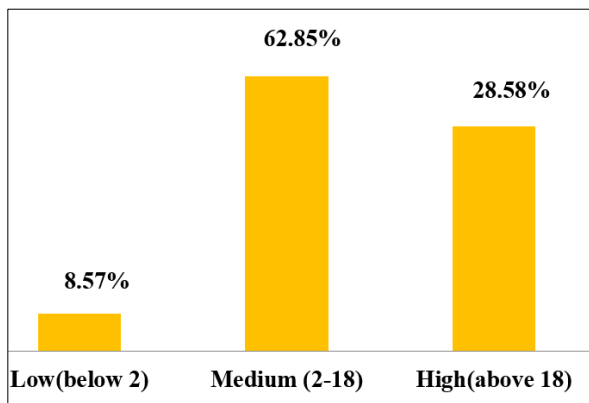


Fig 6: Distribution on the basis of Experience in PG and Ph. D

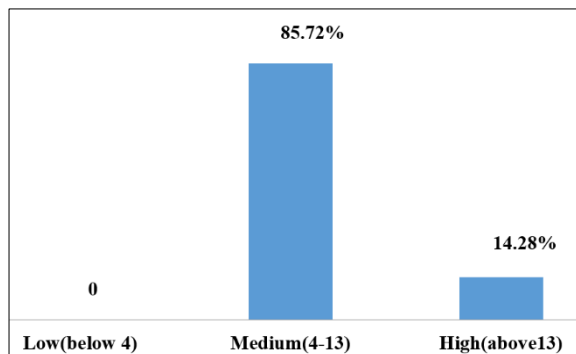


Fig 7: Distribution on the basis of load per week

**7. Credit load per week: n=35**

In terms of credit load per week, around 85.72% of the faculties had medium credit load between 4 and 13 hours and 14.28% of the faculties had high credit load of more than 18 hours.

**8. Affiliated University: n=35**

Most of the respondent (85.71%) in the study area was found out to be working in CAU(I). (8.57%) from RLBCAU and followed by (5.72%) from RPCAU.

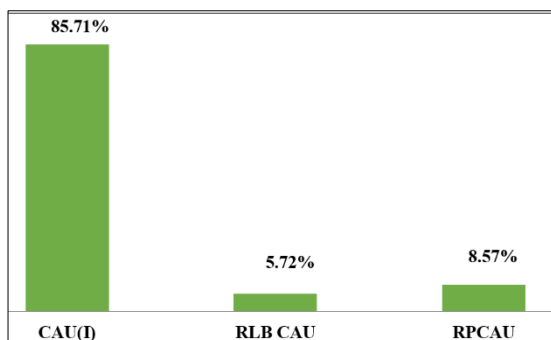


Fig 8: Distribution on the basis of Affiliated University

**2. Faculty Review**

**A. General Structure/ Credit Hour**

Regarding the credit hours assigned to the major courses 51.43% of the faculty members agreed, 28.57% highly agreed and 8.57% did not agreed. Majority of the faculty members found appropriate with the new curriculum as it has been focused more towards research. The credit hours assigned to minor courses 62.86% of the faculty members agreed, 28.57% highly agreed and 2.85% not agreed. And the credit hours assigned for supporting courses 48.58% agreed and finds it appropriate.

34.29% of the faculty members did not agree in opting out mid-term and comprehensive examination from Ph.D. as it usually helps the scholars in preparing for further examinations and 34.29% of the faculty members did not agree that it will help the Ph.D. focus more on research as it does not interfere with any research work. 54.29% of the respondents agreed on the credit hours assigned to PGS courses as it will make the students more aware and attentive towards the subject. Reducing the credit hours of the courses and increasing for research work hours, 48.58% of the faculty members agreed as it will help students become more research oriented.

**B. Course Content**

The new courses incorporating emerging issues and topics of each discipline 62.86% of the respondents agreed to it. This has to do with the new syllabus for example in Agri. Ext. about 70% of the syllabus was changed making it more relatable in today's world by adding subjects like landscape and climate change. 57.14% of the respondents found the syllabus contemporary and need based were 5.72% of the faculty members did not agree to it. 48.58% majority agreed that the course/syllabus has a good balance between theory and practical work and maximum of the faculty 40.00% agreed to the statement that the current course content was improved and updated from the previous courses. 60.00% of the respondents find the course relevant to each and every discipline. And 45.72% somewhat agreed to the new course content having excessive overlap within different courses of the same discipline. 45.71% of the respondents did not agree with the statement there will be gap in course continuity from graduation to post graduation because the basics of each and every subjects have been taught briefly during graduation.

37.14% faculty members somewhat agreed to the difficulty faced to cover the course content with the facilities available as being a new curriculum the faculty members have to be familiar thoroughly with the new syllabus and prepared notes before lectures, but as of now they are sticking it to review papers which was not convenient for the older Professors. Majority of the respondents 51.42% somewhat agreed to the statement that the content of the new syllabus comply with the overall objectives of entrepreneurship development among students mentioned in the new education policy. This was due to some disciplines like Genetics and Plant Breeding, Agronomy, etc. in which there was not much changes in the syllabus making the entrepreneurship development not much highlighted.

**C. Educational Goals and Objectives**

Majority of the faculty members 57.15% agreed that the syllabus provide optimal scope for hands on activities. 54.29% agreed to the statement that the educational goals and objectives were clearly stated and 60.00% of the respondents agreed that the course objectives and content were thorough and appropriate for the students as it has maximized the scope with new innovation and adoption in each discipline. 54.29% agreed that it will provide scope for practical application of knowledge and 20.00% somewhat agreed to the statement. Majority of the faculty members 51.43% agreed that the new syllabus will make preparation for ICAR examinations much easier as it deals with the latest day to day problems occurring in this era of agriculture. 57.15% agreed that it will be coherent for the preparation of other competitive examination, example- Indian Forest Services. 65.72% agreed that the syllabus will create strong motivation to pursue post-

graduation or research in the particular topic and 20.00% was highly agreed by the respondents. Majority of respondents 65.72% agreed that the syllabus will have enough scope to enhance the employability skills of the students.

#### **D. Teaching Method**

The faculty 62.86% agreed that the teaching methods support active learning and 25.72% somewhat agreed to it. As new technologies and innovations coming up some teaching method needs to be upgraded like computerized classroom (Power Point Presentations) where visuals can be shown during lectures as to give the students more knowledge and ideas, visit to certain places in relation to a particular course work, etc.

42.86% agreed and somewhat agreed that there was enough study material available to teach the new syllabus. As of the changes made in the new curriculum it was hard for the faculties in compiling the theory for the students as they have to go through many review papers instead of books. 48.58% somewhat agreed that the syllabus was difficult to teach comparatively. And 45.71% agreed that there is ample scope to adopt new techniques of teaching such as seminar, presentation, group discussion, project, etc.

#### **E. Timings**

Maximum of the faculty members 45.71% agreed that the new curriculum in the education system was introduced at the appropriate time and 57.14% agreed that the curriculum schedules are appropriate for the students.

#### **Conclusion**

The new ICAR curricula aim at developing much needed agricultural skills and encouraging entrepreneurial mindset among the students. The new curricula are directed to inspire students to take up self-employment to sustainably enhance their skills and to propel agricultural transformation through science-based policy options and action.

#### **Recommendations**

Up-to-date books and e-materials should be pre-updated before the initiation of the syllabus. Adaptation of the course syllabi by the instructor/teachers and senior professors has to be built before its initiation. Teachers should be trained on industry oriented teaching-learning techniques. Mid-term examination should be conducted for PhD students, so that they will be trained for writing answers within limited duration of examination which will be helpful for their future examinations. Comprehensive examination should be conducted to make the students fit for facing all competitive examinations. The recruitment of more faculty members in the specific subject area is very much required to improve exposure to students and upgrade the quality of teaching.

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