

TOWARDS EXTENSION EDUCATION REFORMS 2.0: THE REALITIES, EXPECTATIONS AND IMPERATIVES



Being an extension student is currently a matter of fate for many. We need to make this a choice through strengthening research in extension argues, Mr Sreeram Vishnu and Dr Jancy Gupta.

CONTEXT

The science of extension is evolving and advancing worldwide. The discipline, primarily aimed at empowering the farming community by the means of education and communication, has undergone vast changes over the years. Generally extension education is considered as a profession. A profession is something which needs to be carried out with skill and expertise. But can we justify the status of extension as a profession in the present context? Has the discipline adjusted and modified itself to cater to the emerging needs of its practitioners, particularly the grooming researchers? Through this paper, we are trying to analyse present status of extension as a professional discipline. Also an attempt is made to examine the needs and expectations of the student community.

The extension policy makers seem to continue with an intuition that “All Is Well”. For improvements in any discipline, continued focus on research and quest for advancement are necessary. Changes occurring within and outside the system should be acknowledged. However, the extension science is currently at the crossroads—standing averse and apathetic on many critical issues. There is hardly any attempt to introduce any reforms in the age-old methods and curriculum of this renowned discipline. Often this has led to unsystematic and irrelevant research, especially those carried out by student researchers, with little/no practical implications. “In SAUs, the extension faculty engages mainly in teaching. The extension research that comes out from the universities is mainly from the M.Sc/Ph.D. thesis work, which are mostly micro level investigations with little or no policy relevant findings” (Sulaiman, 2012).

Several extension scientists are raising concerns about the quality and contribution of extension research through AESA (Agricultural Extension in South Asia) blogs. As a “field-oriented” professional discipline, the extension research differs significantly from other social science research in terms of its content and methods. Lack of adequate field-orientation and poor professional standards in research have eroded the credibility of extension research and practice. Adding to these woes, the current research tools in extension are outdated and their continued use has resulted in stereotypic and insignificant outcomes. Due to lack of practical significance and stagnation in theory development, extension research is often criticized by other agricultural disciplines as a “non-performing discipline” (Prasad, 2013; Sethuraman, 2015).

Being a student of such demoralised discipline is less desirable for any scholar, lest to carry out a good research. The extension students are often considered as second grade, incapable of doing research or doing what a layman can do. This adversely affects the morale of the students and practitioners. But is it tenable to blame, only the student/young researcher for his or her incompetency? If yes, then that is turning a blind eye on some of the critical inadequacies of the system, for sure. Let us look at the issues.

CURRENT INADEQUACIES

1. Lack of quality resource materials and uniform syllabus

Extension discipline is very rich in terms of resource materials. Many publications as well as e-resources cater to the information needs of student community. However, the quality and content of the material presented is very poor, many a times. Some authors are looking for reinventing the wheel. In other words, they are trying to present the same information that is already available. For example, the age-old communication models are being presented in many books with slight modifications. Another major issue is the lack of a uniform syllabus across the Universities. Students of Deemed Universities (DUs) have an upper hand over their counterparts in SAUs, as the syllabus followed in DUs is more relevant with respect to the All India Agricultural competitive exams. This creates a division among the students of the same discipline which is not at all desirable. Given the urgent need for manpower resources in the agricultural extension sector in India, competent personnel from all Universities are needed in this sector.

2. The looming spectre of irrelevance

Students of the discipline are compelled to follow the obsolete and impractical syllabus. Courses dealt at the PG and Ph.D. levels are almost the same in terms of content. Hence, a student gains little in terms of subject knowledge or its advancements even after the completion of his Doctoral degree. Surely, these are not good signs for a discipline which is trying to reinvent itself and to stay relevant as a distinguished subject. Extension, already standing on a shaky ground with limited student research output, cannot justify its relevance in such a scenario.

3. Lack of proper research orientation

Research starts with the identification of a relevant research problem. Extension students, often without adequate knowledge and direction, end up selecting a topic which is either obsolete or irrelevant to the present context. Further there is no training for a student in developing the questionnaire/Interview schedule -- an important step in the research. Hence, he/she ends up using a data collection instrument that is available, often without checking the suitability of instrument. Same is the case with index/scale development. Lack of proper orientation is reflecting in each and every stage of their research and the outcome is usually insignificant.

4. The publication mania

Research publications play an important role in communicating advancements to the scientific fraternity. There are a few journals dedicated to extension discipline which are quarterly or biannual. As a result, there is a huge pressure on the respective societies to publish the research papers. Citing this reason, the journals often seem to be less accountable to their members, many

times. Even after the acceptance of their paper, the scholar has to wait years to get it published. Definitely this trend needs to be changed. To make the situation worse, too much emphasis is laid on the number of publications in evaluating a researcher. So the students are in a race to pile up the publications with scant regard to its quality. Soft skills that enhance one's competencies and employability are grossly ignored.

5. The match fixing syndrome

The discipline is endowed with a number of professional societies that conduct regular seminars conferences and workshops annually. Participation in such events bolsters one's orientation to the current advancements of the subject. Students usually participate in such events and some get a chance to do poster/oral presentations. Awards given to the best presenters continue to motivate young researchers and hence advance their research career. Unfortunately many a times, the selection of the best presenter is biased. This disappointing trend leads to frustration among the scholars. Sometimes there is more than one presenter who deserve the recognition. So it is really important to encourage the scholars by awarding the most eligible.

THE WAY FORWARD

1. Restructuring the curriculum

There is an urgent need to standardize syllabus across the SAU's and Deemed Universities. A level playing field can be ensured for all the students across the country by introducing such a reform. Also, there should be a provision to revise the syllabus at frequent intervals in tune with the dynamic agricultural system. The ultimate objective should be to prepare qualified professionals with a unique set of employable/research skills. Academicians The concerned policy makers should be revisiting and revamping the curriculum whenever necessary. More management related courses and practice sessions can be introduced to churn out professional service providers (NAEP, 2012). Besides, there is a need to incorporate more livestock/fishery content in the curriculum.

At the ICAR level, a mechanism to check redundant information and ensure content quality is necessary. Platforms like AESA which are exclusively dedicated to extension can take a lead by suggesting content of assured quality on its website. Teaching of the basic concepts should be very minimum at the post-graduate level as most of the basic concepts of communication, diffusion and adoption are already covered at the under-graduate level. Further, under the major discipline of agricultural extension, there can be sub-fields where students can specialise at the M,Sc, and Ph.D. level. A student can then easily identify a suitable research topic in his area of specialisation. "Extension faculty of SAUs may take lead in preparing a "researchable problems list" for M.Sc. and Ph.D. students" (Prasad, 2014).

2. Reorienting the research in extension

Changes in the research methods and methodologies should be incorporated in this discipline. Dr. Sethuraman Parmasivan, Dr. R.M. Prasad and Dr. S.V.N. Rao have given valuable suggestions in this regard through some of their previous AESA blogs. Proper orientation to various researchable issues helps students to understand the problem situation and select research topics accordingly. In addition to that, an exposure to advanced statistical tools and software programmes (like

STATA, R programming etc.) should be emphasized. Extension science should definitely move beyond the analysis of averages and standard deviations. Young researchers should be given training at the institute level at regular intervals on new research techniques. Adding to this, we want to reiterate that extension scholars should be given the opportunity to collaborate with researchers from other social science disciplines like Agricultural Economics and Agri-Business Management. Extension research is not a stand-alone phenomenon. It is rather multi-disciplinary in nature (Sethuraman, 2013). There are many things that extension discipline can borrow and learn from other tools such as Logit and Probit analysis, variable modelling techniques, time series analysis etc.

PREVIOUS AESA BLOGS ON THIS THEME

1. **RESEARCH IN EXTENSION: NEW TOOLS TO REINVENT ITS FUTURE**, Dr P Sethuraman Sivakumar. March, 2013. Available at: <http://www.aesa-gfras.net/Resources/file/Blog%204%20Enhancing%20the%20potential%20of%20quality%20videos%20for%20farmers.pdf>
2. **RESEARCH IN EXTENSION: IT IS TIME TO INTROSPECT**, Dr R. M. Prasad. March, 2013. Available at: <http://www.aesa-gfras.net/Resources/file/Blog%205-Research%20in%20Extension%20It%20is%20time%20to%20introspect.pdf>
3. **EXTENSION RESEARCH AND TECHNOLOGY DEVELOPMENT**, Dr M J Chandra Gowda, Dr Sreenath Dixit, Dr R Roy Burman & Dr P N Ananth. February, 2014. Available at: http://www.aesa-gfras.net/Resources/file/FINAL-M_J_Chandre%20Gowda-13-FEB.pdf
4. **EXTENSION RESEARCH: RANDOM THOUGHTS FROM A WELL WISHER**, Dr R M Prasad. September 2014. Available at: <http://www.aesa-gfras.net/Resources/file/Prasad%20Sir-%20Blog%2039-FINAL.pdf>
5. **SCIENTIFIC PUBLISHING IN EXTENSION: ARE WE DOING ENOUGH AND ARE WE DOING WELL?**, Dr S V N Rao, Dr K Natchimuthu and Dr S Ramkumar. October 2014. Available at: <http://www.aesa-gfras.net/Resources/file/Blog%2040.pdf>
6. **NEGOTIATING REALITY: A PRAGMATIC APPROACH FOR CONDUCTING QUALITY EXTENSION RESEARCH**, Dr P Sethuraman Sivakumar. February 2015. Available at: [http://www.aesa-gfras.net/Resources/file/RS-eds-12FEB-2015%20final%20over%20Blog%2044%20\(1\).pdf](http://www.aesa-gfras.net/Resources/file/RS-eds-12FEB-2015%20final%20over%20Blog%2044%20(1).pdf)
7. **NEW ADVANCES IN EXTENSION RESEARCH METHODOLOGIES-PART 1**, Dr P Sethuraman Sivakumar. June 2015. Available at: <http://www.aesa-gfras.net/Resources/file/Blog%2049-1June-Sethuraman.pdf>

Being in the social science category, the researcher in extension should be an expert in both the qualitative and quantitative techniques. However, researchers are applying techniques to collect data without a proper understanding of the same. This neither gives a real picture of the field situation nor enriches the discipline. Although a good number of PRA tools are available, our knowledge is limited to a few like Transect walk, Venn diagrams and Resource mapping. Students should be allowed to gain hands-on experience to apply various PRA techniques. Researchers should get a chance to analyse the real field data using these qualitative research techniques. Attachment training with NGOs for a short period can also be considered.

Research methodology classes should be more practical-oriented by giving more emphasis on the development of data collection techniques. Judgement surveys, essential for many researchers, can be conveniently rolled out using online survey forms like *Google docs* or *Survey monkey*. Statistical analysis and inference making should be taught by working out relevant examples. Practical exams should have the scope for inference making rather than mere analysis of the data. Thus the research in Extension needs a face-lift to increase its impact and restore its credibility among research managers and other discipline scientists (Sethuraman, 2013).

3. Recognition of soft skills on par with the publications

While giving due importance to publications is equally important for an extensionist, he/she should have command over many other skills. Expertise on data analysis, content development for ICT projects and knowledge on software packages (like Web-HIPER for sustainability analysis, Network Visualizer/Pajek for Social Network Analysis etc.) enhance one's competency and employability. Many opportunities to gain exposure and expertise are available through the Massive Open Online Courses (MOOCs). MOOCs are conducted by a consortium of renowned Universities. Online university-level courses are hosted in a wide range of disciplines, including some courses at no charge. COURSERA (US Universities), edX (an Initiative of MIT and Harvard University), Aga Khan Foundation are some of the platforms engaged for this purpose. Recently IIT Kanpur came up with their own platform, AgMOOCs, to impart knowledge and skills related to ICTs. On successful completion of the course, certificates are issued to the participants. Given that, ICTs are going to play a big role in revolutionizing agricultural education, there should be a provision to give a fair weightage to these added skills in evaluating a student in addition to the publications.

4. Research on innovative/emerging fields

New areas of the discipline need to be explored. Emerging fields like Agricultural Innovation System, climate change, impacts of globalization on local food/animal production systems etc. should be given more thrust. To avoid duplication of research efforts, a national level database of all the research dissertations from all the SAUs and Deemed Universities (at least with research title, main objectives and findings) should be maintained. Even though some platforms like Krishiprabha and CeRA are available for this purpose, they are not totally inclusive. Similarly there should be a mechanism to promote linkage among student researchers at National level who are doing research on similar fields/ different facets of same topic.

Students need to be encouraged to participate in seminars and conferences. To avoid bias in judging the presentations, a grading system can be introduced to evaluate the presentations. In this model, all the outstanding presenters can be recognised. This motivates the student community to attend conferences and seminars more willingly and enthusiastically. Finally there should be a mechanism to review the functioning of Professional Societies. The societies should be made accountable to its members in publishing the accepted papers within a reasonable period of time. Also prompt communication with the member authors needs to be ensured.

CONCLUSIONS

Extension is yet to fully realize its great potential. It is the duty of every student and young researcher of this discipline to come up with innovative ideas and dedicated efforts to enrich this discipline. Some Universities in India like PAU are showing the exemplary way of improving the student research by inducting foreign experts in the student advisory committee, and thus providing an international exposure. Such pragmatic attempts go a long way in ensuring investigation of relevant researchable issues by a student. This also leads to the development of a cadre of vibrant scholars, with sound research competencies, capable of well-directed research attempts and fruitful outcomes. Being an extension student is a matter of fate for many. If systematic attempts are made to strengthen its research and restructure its curriculum in line with

the demands of its practitioners, it would become an esteemed profession, and then it automatically becomes a matter of choice to be a student of extension.

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