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Emerging trends of researches in agriculture extension education

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Abstract
The study aims to analyse the contents of articles published in Indian Research Journal of Extension Education. Volume 1 and 2 of 2014 was taken as a sample to analyse the various issues published in it. Volume 1 constitutes the 29 issue and volume 2 constitutes the 32 issues thus total 60 issues were reviewed. The main objective of this study was to find out the emerging research trends in extension education and to see the various important categories of research. The whole content were analysed in following heads title of the research/article, objectives, category of research, sample size methodology or tools and techniques. It was found that majority of research published was done on Adoption & Diffusion (7), Climate change (6) Training (6), ICT (5), Management (5), Entrepreneurship (4), Women Empowerment (3), SHGs (3), LPM (3), Agri. Clinics (2) Sustainable Ag. (1) and privatization (1), journalism (1) and remaining articles came into other categories like one article was from home science, one from forestry etc. It was found that maximum number of researches was on adoption and diffusion, climate change, women empowerment, entrepreneurship etc. So on the bases of this, it was concluded that this is the emerging trend of researches in field of agricultural extension and communication.

Keywords: Extension, Research, Content Analysis and Journal

Introduction
Content analysis is a method for summarizing any form of content by counting various aspects of the content. It is mainly a Quantitative method. This enables a more objective evaluation. Content analysis is a research tool focused on the actual content and internal features of media. It is used to determine the presence of certain words, concepts, themes, phrases, characters, or sentences within texts or sets of texts and to quantify this presence in an objective manner. Texts can be defined broadly as books, book chapters, essays, interviews, discussions, newspaper headlines and articles, historical documents, speeches, conversations, advertising, informal conversation, or really any occurrence of communicative language.

Content Analysis as "a research technique for the objective, systematic, and quantitative description of manifest content of communications" (Bernard Berelson, 1971) [1]. According to Krippendorff, (1969) [2] content analysis as "the use of replicable and valid method for making specific inferences from text to other states or properties of its source. There are generally two broader categories of content analysis conceptual analysis and relational analysis. In conceptual analysis, a concept is chosen for examination and the number of its occurrences within the text recorded. It is important to clearly define implicit terms before the beginning of the counting process. To limit the subjectivity in the definitions of concepts, specialized dictionaries are used. Relational analysis depends on conceptual analysis for examining the relationships among concepts in content. It is important here to first decide which concept type(s) will be explored in the analysis. In this study we used relational content analysis on the bases of which we identified the different research areas in extension education.

In this study we analyse the content of Indian Research Journal of Extension Education. Content analysis refers to a general set of techniques useful for analysing and understanding collections of text. Content analysis is a research tool focused on the actual content and internal features. It is used to assessing the nature of the content by capturing snapshot of all the pages on a given website and determine the presence of certain words, images, tools or
applications, video, features, service items, documents, PDFs, excel files, audio files, video files concepts, themes, phrases, characters, or sentences within texts or sets of texts and to quantify this presence in an objective manner (use of qualitative and quantitative approaches). Here we analysed the various issues published in the journal from last two year volumes. The main aim is to identify the various trends of research emerging in extension education and to identify the various types or categories of research methods.

The Indian research journal of extension education published by society for extension education Agra (SEEA) is a multidisciplinary an international journal that publishes scientific articles concerned with all aspects of extension education in general and agriculture extension in particular. The journal is published 3 times per year with distribution to librarians, universities, research centers, researchers in extension and agriculture science. It has 3.92 rating effective from January 1, 2014.

Materials and Methods

In this study we analyzed the content of Indian Research Journal of Extension Education to find out the emerging trend of researches in extension education. The main objective of this study was to find out the emerging trend of research in Extension Education and to categorise them into different categories. Volume 1 and 2 of 2014 was taken as a sample to analyse the various issues published in it. Volume 1 constitutes the 29 issue and volume 2 constitutes the 32 issues thus total 60 issues were reviewed. Mainly content analysis was employed to analyze the current research. Themes were developed and the content of the articles in the selected journals were coded according to categories derived from earlier studies. The results were interpreted using descriptive analysis (frequencies) Then we divide the whole content or researches in six categories that are as follows:-

(i) Title of the research/Article
(ii) Objectives
(iii) Category of research
(iv) Sample size
(v) Methodology/ tools and techniques
(vi) Remark

The theme or research areas in extension education were divided into following categories.

1. **Climate change** – researches related to changing environment and their impact on humans and animals, disaster management, drought management were put under this category.
2. **Gender Issues** - researches related to gender differences and development regarding gender were put under this category.
3. **Training** – researches related to transfer of technology, effectiveness of training programme, impact of training etc. were put under this category.
4. **Agri. Management** – researches related to management behaviour of farmers were put under this.
5. **Women empowerment**- researches which focus on women’s condition and their development were categorised under this.
6. **Entrepreneurship** - researches focuses on entrepreneurial activity or behaviour were come under this.
7. **Role of information communication technology** – researches related to use of technology were put under this.
8. **Agricultural clinics** - researches on KVK were put under this category.
9. **Sustainable agriculture**- researches related to sustainability were come under this.
10. **Privatization** – researches related to private extension services were put under this.
11. **Self-help group/ Microfinance**- researches related to group dynamics and finance come under this.
12. **Adoption and diffusion** – researches related to use of some new agricultural practices were come under this.
13. **Livestock Production Management (LPM)** - researches related to livestock and dairy were come under this.
14. **Journalism**- research related to farm publications were come under this.

Then on the bases of above 14 categories, we divide or put each article into them and then by calculating the frequency we tried to find out the emerging trends of research in extension education.

### Results and Discussions

In this study we analyzed the content of Indian Research Journal of Extension Education to find out the emerging trend of researches in extension education. Content of various issue were analysed in 6 categories that are title of research, objectives, category/ type, locale and sample size, methodology tools and techniques and any other remark. This was done to know the emerging trends of research area in extension education and to get familiar with the typology or methodology of research. It was found that majority of research was done on Adoption & Diffusion (7), Climate change (6) Training (6), ICT (5), Management (5), Entrepreneurship (4), Women Empowerment(3), SHGs (3), LPM (3), Agri. Clinics (2) Sustainable Ag.(1) and privatization (1), journalism (1) and remaining articles were come into other categories like one article was from home science, one from forestry etc. Majority of the research were used single method of data collection that is Interview Schedule and few researches used multiple tools like Interview Schedule, observation, case study, FGDs etc. to collect data. Quantitative researches are more in number as compare to qualitative research. It was also found that maximum researches are Ex-post facto, descriptive and Analytical in nature while very few research are exploratory and conceptual in nature. More number of researches used small sample size that is in between 100-200 while one or two researches used larger sample size (945) to collect data. In depth researches are very less in number all of the researches used various statistical techniques to analyze the data.

<table>
<thead>
<tr>
<th>S. No</th>
<th>Category</th>
<th>Frequency</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Climate change</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Gender Issues</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Training</td>
<td>6</td>
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<tr>
<td>4</td>
<td>Agri. Management</td>
<td>5</td>
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<tr>
<td>5</td>
<td>Women empowerment</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>Entrepreneurship</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>Role of information communication technology</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>Agri. Clinics</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>Sustainable agriculture</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Privatization</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>Self help group/ Microfinance</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>Adoption and diffusion</td>
<td>7</td>
</tr>
<tr>
<td>13</td>
<td>LPM</td>
<td>3</td>
</tr>
<tr>
<td>14</td>
<td>Journalism</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>49</strong></td>
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</table>
It was found that 49 articles or research papers out of 60 was fall under above given category and rest 11 related to different category like one paper was on home science research and one is on statistics etc.

**Conclusion**

After analyzing the content of two volumes of Indian research journal of extension education 2014 we found is that maximum researches were on adoption and diffusion, climate change, women empowerment, entrepreneurship etc. so on this bases we said that this is the emerging trend of researches in field of agricultural extension and communication. On the bases of this study we suggest some categories of researchable areas in agricultural extension and communication. These are as- Adoption and diffusion of Agricultural Practices, Climate change, Gender issues, Information and communication technology (ICT), Sustainable agriculture, Farm journalism, Communication, Management, Migration of youths, Women empowerment, Youth employment, Extension institutes, Social group dynamics and microfinance/ SHGs etc. These are some areas of emerging research in field of extension education. So research should be conducted on these areas in future.

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**References**