RESEARCH ARTICLE ‖

Content Analysis of Agriculture News Published in English Daily (Business Line)

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ABSTRACT

Content analysis can be used with various data sources, including textual data, visual stimuli (e.g., photographs/videos), and audio data. An English daily newspaper (Business Line) was purposively selected for content analysis study. From June 2020 to May 2021, the daily newspapers were surveyed to study the subject matter coverage and monthly frequency. The study shows that the news published was highly about government policies/plans/reforms, weather & climate, commodities sales & trends, and exports and imports. From the selected year, it was found that highly frequent coverage of the agricultural news was observed during October, followed by June and May months. Readability analysis was done by randomly selecting five percent of the articles from the total news items identified. From the analysis, it can be viewed that the level of difficulty in reading the articles ranged from standard to very difficult. The average score was found as 46.9, which is "Difficult" to read. It is concluded that the newspaper had good coverage of agriculture articles and it has been suggested to reduce the difficulty level of the contents of the articles.

INTRODUCTION

The methodological technique of content analysis appears to be on the verge of a renaissance. Content analysis can be used with various data sources, including textual data, visual stimuli (e.g., photographs/videos), and audio data. In addition, the technique is highly flexible in that it can be either empirically or theoretically driven. Media influence public awareness through agenda setting and framing of news by selecting what is published, how frequently, and through what frames (Devin *et al*., 2012). The role of print media in publishing agriculture articles is immense as it is used widely to disseminate new technologies and other related pieces of information. To analyze the reporting of topics such as agricultural issues, researchers use content analysis, an observational research method used to systematically evaluate the symbolic content of all forms of recorded information (Tucker *et al*., 2003). Rogers (2003) stated that most people develop their initial awareness of issues through the mass media and the media are also a primary source of information about technology and science issues. The newspaper plays an important role in creating awareness about the issues that develop the society and therefore, it is important to know what news categories of agriculture news are covered, daily reportage in the selected newspaper (Balarubini, M. and Karthikeyan, C. 2014). This paper deals with content analysis of agriculture news published in English daily and highlights the emerging trends in this area.

MATERIAL AND METHODS

An English daily newspaper (Business Line) was selected purposively for the study. The prime consideration for selecting the newspaper was its views on Agriculture, especially from a business point. It also includes news on agriculture production, weather forecasts, COVID-19 impact on agriculture, government plans and policies, etc., which shows its wide coverage on agriculture. This shows that this daily is nothing less when compared to other dailies in the publication of agriculture news broadly. The daily newspapers were surveyed from June 2020 to May 2021. All Agricultural news articles that appeared during the selected period were analyzed. 1152 news articles were analyzed for the study, which was circulated over a year. The frequency and Percentage of agriculture news published in that particular year was analyzed.

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The readability of the news articles are is an important criterion for its reach among the public. Many formulae and grades are available for calculating reading ease in different sites and languages. In this study, the Flesch Reading Ease formula, developed by Rudolph Flesch in 1948 was used to analyze the readability. The analysis was done by randomly selecting five percent (i.e., 58 news articles) of the articles from the total news items identified (1152 news articles).

A renowned site named https://www.webfx.com/tools/read-able/ was used to obtain Flesch reading ease scores of the news items intended by the researcher.

RESULTS AND DISCUSSION
Subject matter coverage:

All the subject matters regarding agriculture were covered as listed in the following table 1. The study showed that the news published were highly focused on government policies/Plans/Reforms (15.02%), weather & climate (12.41%), commodities sales & trends (11.02%) and exports & imports (10.76%) and the least priority was given to crop protection, inputs & raw materials, varieties & hybrids and Kharif & Rabi sowing. It is obvious from the data that agriculture marketing aspects and government interventions in agriculture were given more importance than agriculture production aspects, which explains the Business Line its name.

Insights on the coverage:

News articles related to government policies/plans/reforms had all the information about various measures taken by the government related to the agriculture and farming community. It included information about new policy frameworks for improving farming practices, provision of incentives, subsidies, improved reforms, etc. Weather & climate news were published regularly and descriptive information on steps to be taken during the monsoon period and precautionary measures to avoid heavy flooding were given. News on sales & trends of pulses and other food grains were provided frequently. Exports & imports information of commodities such as basmati and non-basmati rice, cotton, soymeal, etc. were covered, which helps to find the performance and status of agriculture commodities around the globe.

The sugar industry was taken as a separate category because of its daily updates on sugar production, price and turnover. Especially, sugar mills in Maharashtra were emphasized, and their appearance in news articles was frequent. Area, production & productivity of different crops in different regions throughout the year were covered and these details could be useful in estimating the overall performance of agriculture during the selected year. The pricing category covered information about the price volatility of Agricultural commodities and it is assumed to have played a major role in determining the appropriate prices for the different agricultural commodities according to their demand & supply.

Farm laws/farmer protests category gave a detailed description of the newly formulated farm laws and farmers' agitation towards the government's ban on the illegal use of HTBt cotton. News on the involvement of the government in consoling the farmers to withdraw their protests and many rounds of the discussion held between the farmers and the government officials were covered. This category gave a detailed description of the farmer's attitude towards the proposed decision and the extent of involvement of government when farming is considered.

News about many agriculture startups and different emerging enterprises was provided, which helped identify the potential ventures and scope for better marketing strategies in agriculture. These news articles also help in stimulating the entrepreneurial behavior among the farmers. Digitization and e-commerce category's coverage was about the available and newly developed online platforms & networks for trading and other agro advisory services. News on COVID-19 impact on agriculture was less and it justifies the growth of the agriculture sector during the pandemic.

Kharif & Rabi sowing news particularly covered the seasonal activities, what was done and yields of both the seasons. It included news on irrigation management, pre-sowing practices, crop development, etc. Various varieties & hybrids that performed well during the selected year were featured and information on newly developed varieties & hybrids were also given. Inputs & raw materials category covered the available and best suitable organic manures, inorganic fertilizers and other inputs for better production. The crop protection category provided information on the pest management activities during a locust attack. Various measures & remedies made for combating the damages caused were also covered in detail.

Table 1. Subject Matter Covered by the English Daily.

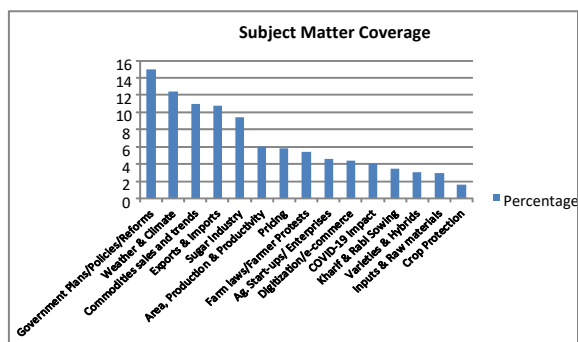| Subject matter	Frequency	Percentage (%)
Government Plans/Policies/Reforms	173	15.02
Weather & Climate	143	12.41
Commodities sales and trends	127	11.02
Exports & Imports	124	10.76
Sugar Industry	108	9.38
Area, Production & Productivity	70	6.08
Pricing	67	5.82
Farm laws/Farmer Protests	62	5.38
Ag. Start-ups/ Enterprises	53	4.6
Digitization/e-commerce	51	4.43
COVID-19 Impact	47	4.08
Kharif & Rabi Sowing	40	3.47
Varieties & Hybrids	35	3.04
Inputs & Raw materials	34	2.95
Crop Protection	18	1.56
Total	1152	100.00

Figure 1. Percentage of Subject matter coverage by the English daily

Monthly frequency of agricultural news in the English daily:

It is found from table 2 that highly frequent coverage of agricultural news was observed in October month with 12.85% followed by June with 9.46% and May with 9.20%, and comparatively less frequent coverage was observed in February, followed by March and August months. It could be assumed from the data that farmers and stakeholders were provided with adequate information related to agriculture in October, June and May months. The coverage can be correlated easily with agricultural activities since October month is known for the commencement of North-East monsoon and June is the starting of kharif season, and May is the pre-monsoon period of South-West monsoon

Table 2.Monthly frequency of agricultural news for a year by the English daily

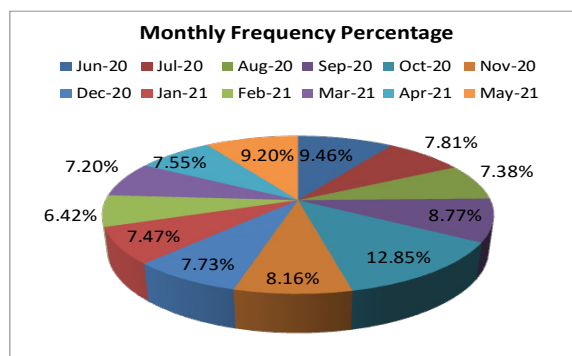| Months (2020-21)	Frequency	Percentage (%)
Jun 2020	109	9.46
Jul 2020	90	7.81
Aug 2020	85	7.38
Sep 2020	101	8.77
Oct 2020	148	12.85
Nov 2020	94	8.16
Dec 2020	89	7.73
Jan 2021	86	7.47
Feb 2021	74	6.42
Mar 2021	83	7.20
Apr 2021	87	7.55
May 2021	106	9.20
Total	1152	100.00

Figure 2.Percentage of Monthly frequency of agriculture news for a year

Readability Analysis

Agricultural education news creates awareness among educators, students, and farmers, and therefore the quality of the news must always be reviewed (Balarubini, M. and Karthikeyan, C. 2014). The readability of the contents in a newspaper is an important aspect for the survival of that newspaper in the long run. It helps the reader easily understand the subject matter without much confusion while reading the article. Hence readability is an effective criterion that can be considered for analysis. In this study, 5% of the news articles that were covered over the selected year were randomly selected and used for analysis.

Table 3.Categorization of news articles based on their readability scores

Readability category	Score range	No. of articles	Percentage (%)
Very difficult	0-30	7	12.07
Difficult	31-50	28	48.28
Fairly difficult	51-60	13	22.41
Standard	61-70	10	17.24
Fairly easy	71-80	0	0.00
Easy	81-90	0	0.00
Very easy	91-100	0	0.00
Total		58	100.00

From the analysis, it is vivid that the level of difficulty of the articles ranged from standard to very difficult. None of the articles was in the range of fairly easy to very easy for reading. The average score of the articles was 46.9, which is "Difficult" to read. This shows that consideration can be given to publishing articles to make them easy to read, since agriculture news will be most useful for the farmers and other agricultural stakeholders, especially for those who involve in agricultural marketing both on a small and large scale. Ensuring that they understand the news easily is essential for effective communication.

As the study indicates that 84 percent of the news items were classified under the difficult category, it is suggested to enhance the readability of the news items by following the strategies such as short and easy words can be used for improving the understanding of the readers, shorter sentence length will correct convoluted sentences, increasing readability and jargons could be dropped off for effective interpretation and clearance of concepts or information that the publisher wants to communicate, etc. These suggestions could help increase the readability of the articles.

In total, the research findings are similar to the descriptions made by earlier researchers Balarubini & Kartikeyan (2014).

CONCLUSION

It can be witnessed from the above study that the subject matter areas such as government policies/ plans & reforms, weather & climate, commodities sales & trends and export & imports were given much priority in the coverage of agriculture news during one-year period. A study on the monthly frequency of the coverage of agriculture news articles revealed that during October, June and May months, the frequency of publishing agricultural news is higher when compared with other months of the selected year. Finally, the readability analysis showed that the randomly selected articles' overall rating was difficult to read. It can be concluded that the selected newspaper has good coverage on various aspects of agriculture over a year. It is suggested to reduce the level of difficulty of the contents so that it can be easily understood by the farmers and other agriculture stakeholders. The newspaper covered about fifteen categories of news related to agriculture, which shows its wide coverage. Detailed descriptions were given for every news article for better understanding. Articles of Agri-business and commodities were widely covered which bears the torch to improve the scope of agricultural marketing within the country and across the globe.

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