Content analysis of Vyavasayam farm magazine

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ABSTRACT

The study was focussed on analysis of the subject matter coverage, direction of content and information level of content of articles published in VYAVASAYAM farm magazine during the years 2009-2012. All the 48 issues published in four years were considered as a sample of study. For trend analysis of content covered from 4 consecutive years from 2009-12 were considered. Extent of coverage out of total 500 articles published most of them   (24.00 %) belong to success stories followed by crop protection (21.06 %), farm mechanization (9.60) and horticulture (8.8%). Trend in coverage of content was reveals that articles on success stories followed by crop protection, farm mechanization and indigenous technical knowledge were given priority. Information percentage index for nutrient management was 40.9 and direction of content was positive.

KEY WORDS: Crop protection, farm mechanisation, horticulture, success stories, Vyavasayam magazine

INTRODUCTION

Timely dissemination of technologies in right form to right farmers is necessary to get the derived benefit. Print media provide an excellent opportunity for communicator to convey precise and timely information to a larger section of their clientele (Shirke and Sawant, 2006). The printed information remains more permanent, ensure greater accuracy, and serves as ready reckoner for farmers further and future reference. There are several farm magazines being published from various organizations. Only very few attempts are directed towards assessment of content coverage extent, trend analysis, information percent index and direction of content. Desire to make best utilization of magazine in dissemination of agricultural information to the farmers for better understanding and to cater diversified information needs ignited to conduct this study. Hence, the present study has been taken up to evaluate the Vyavasayam magazine for its contents coverage and to analyse the trend of coverage.

METHODOLOGY

"Vyavasayam" a monthly farm magazine published by Acharya N G Ranga Agricultural University was selected for the study. This magazine is published in Telugu language. All the issues published during the years 2009-2012 were considered as a sample for the study at subject matter coverage, mode of presentation, direction of content and information index. For trend analysis and extent of coverage of content during 2012 were considered. For information per cent index nutrient management category with

11 indicators for being informative and developed the coding sheet and calculated the information per cent as shown in the table 2. The direction of content in farm magazine content analysed in terms of their evaluative nature for content of nutrient management. It can be expressed as favourable or unfavourable and neutral.

RESULTS AND DISCUSSION

All the articles published in farm magazine under consideration during study period were grouped into different aspects of farmers interests and presented in Table 1.

It is evident from Table 1 that majority of them belong to success stories (24.00%) followed by crop protection (21.06%), farm mechanization (9.60 %), indigenous technical knowledge (9.60%), horticulture (8.80%), soil management (6.40%), nutrient management (5.60%) animal husbandry, fisheries, livestock production (4.80 %), organic farming (3.20%), post harvest management (3.20%), and weed management(3.20%).

Table 1 : Extent of content coverage in Vyavasayam

S.No.	Subject matter	No. of articles	Percentage	Rank
1.	Nutrient management	28	5.6	VII
2.	Crop protection	108	21.6	II
3.	Weed management	16	3.2	IX
4.	Soil management	32	6.4	VI
5.	Indigenous technical knowledge	48	9.6	III
6.	Animal husbandry, dairy, fisheries, livestock production technology & poultry	24	4.8	VIII
7.	Post harvest management	16	3.2	IX
8.	Organic farming	16	3.2	IX
9.	Horticulture	44	8.8	V
10.	Farm mechanization	48	9.6	III
11.	Success stories	120	24	I
		500.00	**100.00**	

Trend in coverage of content

Table 2 reveals that the articles published per year ranged from112-133. It could be comprehended that articles on success stories were more followed by crop protection, farm mechanization and indigenous technical knowledge were given priority as compared to other subject matter during the period 2009-2012.

Table 2 : Trend in coverage of content in Vyavasayam

S.No.	Subject matter	Number of articles				
		2009	**2010**	**2011**	**2012**	**Total**
1.	Nutrient management	8	7	8	5	28
2.	Crop protection	30	26	28	24	108
3.	Weed management	5	4	5	2	16
4.	Soil management	5	11	9	7	32
5.	Indigenous technical knowledge	14	10	13	11	48
6.	Animal husbandry, dairy, Fisheries, livestock production technology & poultry	4	8	7	5	24
7.	Post harvest management	2	6	5	3	16
8.	Organic farming	3	5	3	5	16
9.	Horticulture	13	9	10	12	44
10.	Farm mechanization	14	12	12	10	48
11.	Success stories	35	27	30	28	120
	Total	133	125	130	112	500

Information per cent index for content information level

The content might or might not possess information, which is to be informative, and possess all the indications for being informative. Different content should have different indicators for being informative and it is the fraction or division of content areas into the maximum possible number so as to present the totality of the content.

The developed indicants are the independent coding unit for a particular content category. The present study focussed on nutrient management and had ten indicators for being informative and developed the coding sheet and calculated the information per cent index as shown in the Table 3.

Table 3: Coding sheet for information per cent index for nutrient management

S.No.	Coding unit	Adequately present	Not adequately present	Not at all present
1.	Importance of nutrient management	+1		
2.	Information on different			

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	application methods of nutrients			
3.	Information on dosage of fertilizers	+1		
4.	Time of application of nutrients	+1		
5.	Programme and schemes related to nutrient management			-1
6.	Information about biofertilizers	+1		
7.	Preparation of organic manures			-1
8.	Information about soil testing and status of soil			
9.	Information about different nutrient deficiency symptoms	+1		
10.	Information about different nutrient toxicity symptoms			
11.	Information regarding micronutrients	**+1**		
		+6	**0**	-2

Adequately present +1, not adequately present 0, not at all present -1.

Scores were analysed as follows:

　　　Frequency of the content areas was three. Hence, the score obtained were average and index was calculated by the formula.

$$\text{Information per cent index} = \frac{\text{Obtained coding score}}{\text{Maximum obtainable coding Score}} \times 100$$

Total score　　6 - 2 = +4

Direction　　　positive

First article　　　　　　+ 4

Second article　　　　　+ 5

Third article　　　　　　+ 6

Fourth article　　　　　+ 3

　　　　　　　　　　18　　　　　　Average = 4.5

Maximum obtainable score   +11

$$\text{Information percentage index} = \frac{4.5}{11} \times 100 = 40.9$$

Direction of content

Direction is a commonly recognised characteristic of communication content. The direction of the content refers to the attitude expressed towards any symbol by its user. The direction may be motivating or non-motivating, evaluative or non-evaluative frequency of the content areas was there. Hence, the score obtained were averaged and index was calculated by the formula.

The procedure for determine the direction of the content needs a careful preliminary study of the content or the script as the case may be. The attitude can be expressed as positive or negative, favourable or unfavourable, approval or disapproval etc. But such dichotomies must include a middle place for neutral category.

The present study analysed the direction of nutrient management in terms of their evaluative nature. The indicants of evaluative direction of the nutrient management information were listed and collected by the researcher in consultation with specialists as in the case of indicants for calculating the information per cent index. Indicants were separately worked out for sub-category on nutrient management. nutrient management content unit had 8 evaluating indicants it varied from category to category. The following directions were used in the analysis.

(1) **Favourable direction**: positive symbol (+) was given if the indicant was present in the message.

(2) **Unfavourable direction**: negative symbol (-) was given if a particular

item was absent in the message.

(3) **Neutral or no direction at all** : zero (0) was given if the message was neutral or showed no direction.

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Intensity of direction of the content

Intensity refers to the strength of the language used to endorse or denounce a given object, a person group or activity. Intensity in Singh's study referred to the intensity the intensity of the evaluative information present in the content category. Berelson has quoted that, "by scanning, the other remaining categories (not included in the study), looking into the precision, it can easily be concluded about the intensity of direction of the whole content.

In order to measure the intensity of direction a statistical measure called imbalance coefficient can be worked out.

Imbalance coefficient

In order to measure the direction in studies where the classification of direction has been reduced into the terms of favourableness and unfavourableness an overall estimate of the degrees of imbalance could be employed which would tell the intensity of direction. The statistical measure described below was applicable in the study because of the nature of three directional-classifications (favourable, unfavourable and neutral). The coefficient provided a single figure showing the relationship between the favourable and unfavourable direction of the content and was finally regarded as the intensity of depth of direction.

Formula to calculate the imbalance is as follows:

$$\text{Imbalance coefficient (cf)} = \frac{f^2 - fu}{rt} \; (if \; f > \mu)$$

$$(cu) = \frac{f^2 - u^2}{rt} \; (if \; f < \mu)$$

f = number of favourable coding units of the content

μ = number of un favourable coding units of the content unit.

t = number of the total possible content units within the content units (favourable and unfavourable + neutral + non-relevant units of content).

The total possible content units refer to the maximum possible coding units evolved by the investigator under that context univers' (i.e. with selected content sub-category) out of which a few may not be operative in coding of scripts. This depends upon the nature of the scripts, quality and quantity of information of the content. Hence these are regarded as non-relevant units. r = total units of relevant content (favourable+unfavourable +neutral units of content).

The score obtained in this formula indicates the intensity of direction of the message which ranged between zero to one. The way of using the imbalance coefficient has been explained in the following table which follow.

Table 4: Coding sheet for determining direction of the content of soil nutrient management

S.No.	Coding unit	Direction		
		Evaluative (+) Favourable (f)	Non evaluative	
			Un-favourable (μ)	Neutral (n)
1.	Emphasis over reasons imparting nutrient management	+		
2.	Exploring potentiality to get organic manures		-	
3.	Emphasis over why to use biofertilizers	+		
4.	Telling 'why' to apply nutrients in exact time	+		
5.	Telling why to use micronutrients	+		
6.	Demonstrating 'why to' produce quality organic manures		-	

7.	Informing 'why to' do soil testing and status of soil before application	+		
8.	Saying 'why to' diagnose deficiency symptoms		-	
9.	Emphasising why to test soil	+		

Total favourable coding units (f) = 6

Total unfavourable coding units (u) = 3

Total possible coding units (t) = 10 (unfavourable + favourable + neutral + non relevant unit of content)

Total unit of relevant content (r) = 9
(favourable units + unfavourable units + neutral)

$$Cf = \frac{f^2 - fu}{rt} = \frac{6^2 - 6 \times 3}{9 \times 10}$$

$$Cf = \frac{36 - 18}{90} = \frac{18}{90} = 0.20$$

Result of first article   = 0.20

    Second article   = 0.50

    Third article   = 0.60

    Fourth article   = 0.40

        1.7   average = 0.425

    Direction +ve   (positive)

CONCLUSION

It may be concluded that majority of articles appeared in magazine belonged to success stories followed by crop protection, Indigenous technical knowledge and horticulture. Articles related to soil management, nutrient management, animal husbandry, fisheries livestock production, organic farming, post harvest management, and weed management aspects were given less coverage. Information percentage index for nutrient management was (40.9)

indicating that it is less informative. Direction of content for nutrient management was positive. From the above study it can be concluded that the status of dissemination of farm information is good but they have to focus on soil management, nutrient management, animal husbandry, fisheries livestock production, organic farming post harvest management and also information percent index for articles on nutrient management has to be improved.

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