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Content analysis of horticultural information in agrowon newspaper

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ABSTRACT

Agrowon newspaper is rural oriented newspaper and considered as important source of information on farm technology to the farmers. The present research concerns about study of various agricultural area, horticultural areas illustration used in horticultural information and source for getting articles in Agrowon newspaper. The issues of the Agrowon newspaper published in three year June, 1st 2008 to May, 31st 2011 were considered for the study from these selected issues 122 newspapers were selected randomly for study.The data were expressed in terms of frequencies and percentage for simple comparison and drawing meaningful conclusion. In Agrowon newspaper in agricultural and horticultural information was about 64.78 per cent and non-agricultural information 24.04 per cent. In advertisement agricultural and horticultural advertisement was about 4.66 per cent and non-agricultural advertisement 6.52 per cent. In agricultural information other agricultural information topped (72.21%) followed by crop husbandry (13.55%), animal husbandry (10.15 %) and agricultural policies (4.06%). In other agricultural information general marketing (21.09%), in crop husbandry cash crops (37.97 %), in animal husbandry general information (29.18%) and in agricultural policies finance and insurance (70.54%) were topped. In general farm advice near about 85 per cent information on crop production technologies. Amongst horticultural information, fruit crop (56.54%) topped followed by vegetables crops (29.50 %), flower crops general information (7.84%), in spices crops major spices (3.35 %) and in aromatic and medicinal crops general information (2.77 %) were topped in terms of space covered in sq. cm. In fruit crops sub- tropical crops (42.89 %), in vegetables crops general information (36.31%), flower crops general information (62.59%), in spices crops major spices (76.16%) and in aromatic and medicinal crops general information (72.72%) were topped in terms of space covered in sq. cm. Information of horticultural crops package of practicewise in this, in fruit crops intercultural operation (19.95%), in vegetable marketing (44.26%), the preparatory planting operations in flower (35.20%) in spices (36.45%) and in aromatic and medicinal crops (30.82%) stands in first position. Among types of illustrations used in horticultural fruit, vegetable, flower, spices and aromatic and medicinal crops photographs majority used. In placement of illustrations, in fruit crop right upper right side (19.47%), in vegetable crops upper middle (23.87%), in flower crops upper middle (21.18%), in spices right upper right (38.00%) and in aromatic and medicinal crops left upper left side (32.07%) stands in first position. Amongst colour used in horticultural fruit, vegetable, flower, spices and in aromatic and medicinal crops multicolour topped. In source for getting article, amongst SAU's, MPKV, Rahuri (60.92%) had major source for getting farm articles for Agrowon newspaper.

Key Words : Agriculture, Aromatic, Horticulture, Spices

INTRODUCTION

Newspapers are very useful means of communication to the people. A newspaper or periodical

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properly edited, printed and produced regularly, may serves to establish a continuous link with the people by giving education as well as relevant and timely information on many aspects of the day to day in life. If such a newspaper covers topics of rural matter and farm information, the readers should easily understand its language. It serves as a source of information to ruralities on farming matter. Therefore a rural oriented newspaper is the need of the day.

Among the various methods and techniques used for transfer of agricultural technology, mass media plays a significant role. Through mass media one can disseminate new agricultural information, new extension programme, Government schemes and policies relating to the agricultural development. This will serve a basis for agricultural development. Mass media plays a significant role in bringing awareness among people and in motivating them to be participating in nation building.

Among the various mass media used in a India, newspaper occupies a place of prominence because of its low cost, wide circulations and variety of contents. Print media has its unique role in informing literate farmers. Farm literature like books, folders, bulletins, booklets, farm magazine and newspaper has its own credibility among the readers. Circulation of newspapers in the country grew by 8.23 per cent in 2010-11, as per the 55 annual report of the register of newspapers for India (RNI). As many as 3671 newspapers were published from Uttar Pradesh followed by Delhi with 1993 and Madhya Pradesh with 1243 newspapers, it said.

In terms of circulation, Uttar Pradesh topped the table with more than 6.97 crore copies. Delhi followed with a circulation of 5.27 crore and Maharastra retained the third position with over 2.9 crore copies.

Content analysis is "a wide and heterogeneous set of manual or computer-assisted techniques for contextualized interpretations of documents produced by communication process strictiore sensu (any kind of text, written, iconic, multimedia, etc.) or significant processes (traces and artifacts), having as ultimate goal the production of valid and trustworthy inferences.

Through the locution "content analysis" has come to be a sort of "umbrella term" referring to an almost boundless set of quite diverse research approaches and techniques, it is still today in use in the social and computer science domains and in the humanities to identify methods for studying and/or retrieving meaningful information from documents. In a more focused way, "content analysis" refers to a family of techniques oriented to the study of "mute evidence", that is text and artifacts. Texts come from communication processes strictiore sensu (*i.e.* types of communication intentionally activated by a sender, using a code sufficiently shared with the receiver). There are 4 types of texts in content analysis:

1. Written text (books, papers, etc.)
2. Oral text (speech, theatre plays, etc.)
3. Iconic text (drawing, painting, icons, etc.)
4. Hypertexts (can be one or more of the texts above, on the internet).

'Content analysis of horticultural information in Agrowon newspaper' was undertaken with the following objectives.

1. To identify the space devoted for various agricultural information in Agrowon newspaper.
2. To identify the extent of coverage of horticultural information and its content analysis in Agrowon newspaper.
3. To study the use of illustrations, its type, size and placement in horticultural information in Agrowon newspaper.
4. To study the use of source of horticultural information for Agrowon newspaper.

METHODOLOGY

A list of all the Marathi newspapers published from Maharashtra was obtained from the District Information Officer, Latur. The farm Marathi newspaper in Maharashtra was selected on the basis of following criteria suggested by the Maslog (1983).

– Geographic distribution (whether it reaches all over state or some part of state).
– Stability (consistency of regularity in publication whether it is published regularly or not)
– On the basis of these criteria 'AGROWON' daily newspaper and which is totally devoted to agriculture was identified purposively for the present investigation.

'AGROWON' a farm Marathi newspaper was considered purposefully for the study. The issues of the Agrowon newspaper published in three year during June 1st 2008 to May, 31st 2011 were considered for the study, from this selected issues making the size of sample about 122 newspapers were selected randomly for the study.

Statistical analysis:

The figures are expressed in terms of frequencies and percentage for simple comparison and for drawing meaningful conclusions.

RESULTS AND DISCUSSION

It was revealed from Table 1 the information to advertisement ratio (*i.e.* 89:11) was observed in the Agrowon under study. It is a good sign of a sound and healthy newspaper. It was observed that maximum (64.70 %) newspaper space was allotted to the horticultural and agricultural information. Agricultural and horticultural information occupied 47.58 and 17.20 per cent of the space, respectively. Whereas non-agricultural information occupied 24.04 per cent space in the newspaper. The space covered by agricultural information and horticultural information was three times more than the non-agricultural information. This indicates that the Agrowon newspaper is rural oriented. The space covered by horticultural information is about one third (17.20 %) as compared to the agricultural information.

Table 1: Space covered by the information and advertisements in Agrowon

Sr. No.	Newspaper content	Space coveredin sq.cm. (n = 1797495)	Per cent
1.	**Information**		
	Horticultural	309180	17.20
	Agricultural	855290	47.58
	Non-agricultural	431929	24.04
	Sub total	1596399	88.82
2.	**Advertisements**		
	Horticultural	32128	01.79
	Agricultural	51677	02.87
	Non-agricultural	117291	06.52
	Sub total	201096	11.18
	Grand total (1+2)	1797495	100.00

As regards the newspaper advertisements, agricultural advertisements had occupied 2.87 per cent of the total space and horticultural advertisement had occupied 1.79 per cent of the total space. The non-agricultural advertisement had occupied 6.52 per cent of the total space of the newspaper.

The agricultural and horticultural advertisements occupied equal per cent space to that of non-agricultural advertisements.

It was observed that other agricultural articles topped (66.70 %) in the total number of farm information appeared in the Agrowon newspaper. Amongst the agricultural information crop husbandry was the second highest type, nearly one seventh (13.55 %) of the agricultural information appeared in Agrowon. The slightly low weightage was given to the Animal husbandry (10.18 %). The very less (4.06 %) information was appeared on agricultural policies.

The Table 3 shows that general marketing topped (21.09 %) in the total number of other agricultural information. The meteorology stands second position (20.26 %) and on third position miscellaneous information (15.75 %). Less than ten per cent coverage was observed in case of the area viz., exhibition and meeting information, shetakode, articles on farmers suicide, organic farming and information on fertilizer distribution. Other areas like information on awards, general policies, forest tree and bio-diesel crop information.

The data from Table 4 delineates that among horticulture, fruit crop information topped (54.53 %), followed by vegetable crops (30.79 %), flower crops (7.73 %), spices crops (4.26 %) and aromatic and medicinal crops (2.69 %) in terms of frequency.

Regarding space covered by horticultural information, fruit crop information topped (56.54 %) on second rank vegetable crop information (29.50 %) and on third rank flower crop information (7.84 %). It was followed by spices crop information (3.35 %) and Aromatic and Medicinal crop information (2.77 %).

The Table 5 showed that as regard of frequency of types of illustrations, photographs in sub-tropical crops were topped (43.62 %), followed by tropical crops (34.57 %), general information (13.83

Table 2 : Distribution of articles published on agricultural information in Agrowon

Sr. No.	Type of agricultural articles	Frequency (n = 2760)	Per cent
1.	Crop husbandry	374	13.55
2.	Animal husbandry	281	10.18
3.	Agricultural policies	112	04.06
4.	Other agricultural articles	1993	72.21
	Total	2760	100.00

Table 3 : Types of other agricultural information appeared in Agrowon

Sr. No.	Types of presentation	Frequency (n = 1993)	Per cent
1.	Organic farming	89	4.46
2.	Bio-diesel crops	41	2.05
3.	Forest trees	56	2.80
4.	Farmers' suicide	52	2.60
5.	Exhibition and meeting	191	9.58
6.	Information on awards	77	3.86
7.	Meteorology	409	20.26
8.	General marketing	421	21.09
9.	Information of fertilizer distribution	127	6.72
10.	*Shetakode*	122	6.12
11.	General policies	94	4.71
12.	Miscellaneous	314	15.75
	Total	1993	100.00

Table 4 : Distribution of articles published on horticultural information in Agrowon

Sr. No.	Type of horticultural information	Frequency(n = 893)	Space covered in sq.cm. (n=309180)
1.	Fruit crops	487 (54.53)	174811 (56.54)
2.	Vegetable crops	275 (30.79)	91191 (29.50)
3.	Flower crops	69 (7.73)	24251 (7.84)
4.	Spices crops	38 (4.26)	10368 (3.35)
5.	Aromatic and medicinal crops	24 (2.69)	8559 (2.77)
	Total	893 (100.00)	309180 (100.00)

Figures in the parentheses indicate percentage

%) and temperate crops (2.13 %). Regarding chart, sub-tropical crops topped (2.93 %) followed by general information (1.59 %) and tropical crops (1.33 %) to the total number of types of illustrations used in fruit crops.

As regard placement of illustrations, in sub-tropical crops, right upper right side topped (11.17 %) followed by left upper left side (8.51 %), upper middle side (7.45 %), and left lower left side (5.59 %) and so on. In tropical crops, left upper left side topped (7.45 %) followed by right upper right side (5.85 %), left lower left side (5.05 %). In general information, right upper right side topped (2.66 %) and so on. In temperate crops placement occurs less than 1 per cent to the total number of illustrations in fruit crops.

As regards colour of illustrations in terms of frequency in sub-tropical crops, multicolor information topped (36.17 %), black and white illustrations (10.37 %). In tropical, multicolour illustrations topped (24.47) and black and white (11.44 %). In general information multicolour topped (13.03 %) followed by black and white (2.39 %). In temperate crops multicolour illustrations 1.86 per cent.

A text without illustration is dead. In sub-tropical crops (42.43 %) text was without illustrations as compared to total number of without illustration articles followed by in tropical (36.36 %) and general information (21.21 %).

The overall analysis of illustrations, in terms of frequency, in type of illustrations, photographs topped (94.15 %) followed by chart (5.85 %). In placement of illustration, right upper right side (19.95 %), left upper left side (19.15 %), upper middle (14.89 %), left lower left side (12.50 %), right lower right side (10.64 %) other placement covered less than 10 per cent number of illustrations. In colour of illustrations multicolour topped (75.53 %) followed by Black and White (24.47 %).

As regards space covered by illustrations in sq. cm. in types of illustration, In Photographs sub-tropical crops topped (39.02 %) followed by tropical crops (34.91 %), general information (14.15 %) and temperate crops covered 1.76 per cent space to total space covered by types of illustrations. Among chart, sub-tropical crops topped (5.67 %) followed by general information and tropical crops.

Summary and Conclusions :

Information about the space covered of the newspaper:

1. The horticultural information occupied one sixth (17.20 %) space of the newspaper. The agricultural information occupied 47.58 per cent space in Agrowon newspaper and non-agricultural information occupied 24.04 per cent space in Agrowon newspaper.

2. The information (agricultural, horticultural and non-agricultural) occupied 88.82 per cent space and advertisement occupied 11.18 per cent space in Agrowon newspaper.

Distribution of agricultural information:

1. Amongst the different types of agricultural information, other agricultural articles topped

Table 5 : Types, placement and colour of illustrations used in fruit crop information appeared in Agrowon newspaper

Sr. No.	Forms of presentation	Tropical crops		Subtropical crops		Temperate crops		General		Total	
		Frequency	Space covered	Frequency	Space covered	Frequency	Space covered	Frequency	Space covered	Frequency (n=376)	Space covered (n=32098)
1.	**Type of illustrations**										
	Photograph	130 (34.57)	11204 (34.91)	164 (43.62)	12525 (39.02)	08 (2.13)	564 (1.76)	52 (13.83)	4543 (14.15)	354 (94.15)	28836 (89.84)
	Chart	05 (1.33)	775 (2.41)	11 (2.93)	1819 (5.67)	-	-	06 (1.59)	668 (2.08)	22 (5.85)	3262 (10.16)
2.	**Placement of illustrations**										
	LULS	28 (7.45)	2187 (6.81)	32 (8.51)	2686 (8.37)	03 (0.80)	259 (0.81)	09 (2.39)	895 (2.79)	72 (19.15)	6027 (18.78)
	RURS	22 (5.85)	1940 (6.04)	42 (11.17)	3164 (9.86)	01 (0.27)	57 (0.18)	10 (2.66)	1090 (3.39)	75 (19.95)	6251 (19.47)
	Upper middle	17 (4.52)	1854 (5.78)	28 (7.45)	1982 (6.17)	02 (0.53)	119 (0.37)	09 (2.39)	642 (2.00)	56 (14.89)	4597 (14.32)
	LLLS	19 (5.05)	1765 (5.50)	21 (5.59)	1843 (5.74)	-	-	07 (1.86)	518 (1.61)	47 (12.50)	4126 (12.85)
	RLRS	18 (4.79)	1909 (5.95)	17 (4.52)	1435 (4.47)	-	-	05 (1.33)	248 (0.77)	40 (10.64)	3592 (11.19)
	Lower middle	11 (2.93)	560 (1.74)	14 (3.72)	1333 (4.15)	-	-	08 (2.13)	787 (2.45)	33 (8.78)	2680 (8.35)
	Left middle	07 (1.86)	794 (2.47)	12 (3.19)	1030 (3.21)	-	-	04 (1.06)	491 (1.53)	23 (6.11)	2315 (7.22)
	Right middle	13 (3.46)	970 (3.02)	09 (2.39)	871 (2.71)	02 (0.53)	129 (0.40)	06 (1.59)	540 (1.68)	30 (7.98)	2510 (7.82)
3.	**Colour of illustrations**										
	Black and white	43 (11.44)	3729 (11.62)	39 (10.37)	3270 (10.19)	01 (0.27)	64 (0.19)	09 (2.39)	823 (2.56)	92 (24.47)	7886 (24.57)
	Multicolour	92 (24.47)	8250 (25.70)	136 (36.17)	11074 (34.50)	07 (1.86)	500 (1.56)	49 (13.03)	4388 (13.67)	284 (75.53)	24212 (75.43)
4.	**Without illustration**	48 (36.36)	-	56 (42.43)	-	-	-	28 (21.21)	-	132 (100.00)	-

(Figures in the parentheses indicate percentage).

Table 6 : Source for getting articles for Agrowon

Sr. No.	Source of article	Frequency (n = 6115)	Per cent
1.	State agricultural universities	389	6.36
2.	Development departments	39	0.64
3.	Government institutes	23	0.38
4.	Private institutes	21	0.34
5.	Private personnel	4210	68.84
6.	Editorial	122	2.00
7.	Without source	1292	21.13
8.	Others	19	0.31
	Total	6115	100.00

(72.21 %). In this general marketing stands on first position (21.09 %) followed by meteorology (20.26 %), miscellaneous (15.75 %) and remaining types in information is less that 10 per cent in terms of frequency.

2. Agricultural information on crop husbandry occupied the second position (13.55 %) of the total number of farm information. In this cash crop information topped (37.97 %) followed by cereals (20.86 %) and general (19.78 %).

3. Information on animal husbandry occupied third position (10.18 %) in terms of frequency. In this general information topped (29.18 %) and cow (16.73 %). The buffalo, sheep, goat and poultry had low coverage in Agrowon newspaper.

4. Agricultural policies had 4.06 per cent to the total number of the farm information. In this agricultural finance and insurance topped (70.54 %).

Distribution of article on horticultural information:

In horticultural information, information on fruit crops was topped (56.54 %) followed by vegetable crops (29.50 %), flower crops (7.84 %), spices crops (3.35 %) and aromatic and medicinal crops (2.77 %).

Types, placement and colour of illustrations used in horticultural information (space covered in sq.cm.):

1. In fruit crops, among types of illustrations photographs topped (87.76 %) followed by chart (12.24 %). In placement, left upper left side on first position (19.58 %). In colour, multicolour topped (74.91 %) followed by black and white (25.09 %).

2. In vegetable crops, amongst type of illustration, photographs topped (86.24 %) followed by chart (13.76 %) in placement left upper middle side was on first position (23.87 %) in colour, multicolour topped (83.77 %) followed by black and white (16.23 %).

3. In flower crops, amongst types of illustration, photographs topped (73.22 %) followed by chart (26.78 %). In placement left lower left side was on first position (19.48 %). In colour, multicolour topped (83.88 %) followed by black and white (16.12 %).

4. In spices crops, amongst types of illustrations, photographs topped (77.29 %) followed by chart (22.71 %). In placement right upper right side on first position (38.00 %). In colourmulticolour topped (85.29 %) followed black and white (14.71 %).

5. In aromatic and medicinal crops amongst the types of illustrations, photographs topped (78.81 %) followed by chart (21.19 %). In placementleft upper left side was on first position (32.05 %). In colour of illustrations,multicolour topped (76.77 %) followed by black and white (23.23 %).

Source for getting agricultural information's:

1. In source for getting information, private personnel were on first position (68.84 %), the without source information of second position (21.13 %) and SAUs on third position (6.36 %). The remaining sources like Editorial, Development Departments, Private Institutes, Government Institutes and other had less contribution.

2. As concerned to the contribution of all SAUs, Mahatma PhuleKrishiVidhyapeeth, Rahuri has highest (60.92 %) contribution, while Dr. Balasaheb Sawant Konkan Krishi Vidhyapeeth has lowest (6.17 %) contribution.

Conclusions :

From the finding of this study, it is concluded that,

3. Space covered by Agricultural and Horticultural information as compared to non-agricultural information is excellent. This is sign of sound and healthy newspaper.

4. Amongst articles on agricultural information, more coverage was given to other agricultural articles than crop husbandry, animal husbandry and agricultural policy. On agricultural policies very few information was given.

5. In other agricultural information, organic farming, bio-diesel crops, forest tree information was covered but less in number.

6. More information on fruit crops was observed, but spices and aromatic and medicinal crops information was less covered.

7. In illustrations types, photographswere the most commonly used illustration in the horticultural information. So there is scope to use other types like graphs, cartoons, maps and drawings.

8. Most of the horticultural information was appeared on upper middle side and rarely on left middle.

9. Among the colour of illustrations, more than 70.00 per cent photographs were in multicolour.

10. Without illustration information in horticulture was also observed in Agrowon newspaper in measurable frequency.

11. In source for getting information private personnel were topped. In SAUs, MPKV, Rahuri has contributed more. So Agrowon is having scope to motivate the farm scientists from other SAUs for getting farm information.

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