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Study of extent of coverage of flower crop information and its content analysis in Agrowon newspaper

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Abstract

Most of farmers who read newspapers are interested in reading about farming-related topics. Newspapers can therefore be a useful tool for educating farmers about technology. As a result, there is potential for agricultural information to be published in regional newspapers. Investigating the study of covering of different agricultural areas is crucial, with a focus on horticulture and a range of sources for farm information. Therefore, the Agrowon daily is focused on rural areas and is regarded by farmers as a valuable source of knowledge on agricultural technology. The study of different agricultural and horticultural areas, the illustrations used in horticulture information, and the sources for articles in the Agrowon newspaper are the focus of the current research. A selection of the Agrowon newspaper's editions from June 1, 2008, to May 31, 2011 was taken into consideration for the purpose of the research. For the study, 122 newspapers were chosen at randomness. Both percentages and frequencies were used to convey the information.

Amongst horticultural information, fruit crop (56.54 per cent) topped followed by vegetables crops (29.50 per cent), flower crops general information (7.84 per cent), in spices crops major spices (3.35 per cent) and in aromatic and medicinal crops general information (2.77 per cent) were topped in terms of space covered in sq. cm. In fruit crops sub- tropical crops (42.89 per cent), in vegetables crops general information (36.31 per cent), flower crops general information (62.59 per cent), in spices crops major spices (76.16 per cent) and in aromatic and medicinal crops general information (72.72 per cent) were topped in terms of space covered in sq. cm.

Keywords: Content Analysis, horticultural Information, Flower crop information, Agrowon Newspaper

Introduction

Most of farmers who read newspapers have a curiosity in reading about farming-related topics. Newspapers can therefore be a useful tool for educating farmers about technologies. Newspapers in local languages have the potential to provide agricultural-related data (Kalantri *et al.*, 1991) ^[4]. Examining the extent of the analysis of different agricultural data is crucial. Print media, out of all the mainstream media, are crucial in helping rural communities learn about farms. Newspapers serve a special function in print media since most farmers who read them have a curiosity in reading about farming. On April 19, 2005, the Sakal group of newspapers launched Agrowon, the first Marathi daily exclusively focused on agriculture. The most recent agricultural reports and views, political coverage that impacts farmers' social and economic lives, growth at the national, international, and state levels, farmer achievements, research and development, and new proposals on processing agricultural produce, market rates and trends, weather forecasting, and consumers are all included in Agrowon. In addition, Agowon includes a number of Central and State Government programs, agricultural science and technology, agricultural goods exports, and trade facilities and processes.

When it comes to revising and providing farm data for farmers' advantage, this kind of study is believed to be very beneficial to authors, farm authors from State Agricultural Universities, Research Institutions, Developmental Divisions of Government, NGO's, and progressive farmers. The findings of the research will be helpful in enhancing the printed farm material's physical composition. The Maharashtra and Indian governments are placing a strong focus on horticultural growth initiatives.

Therefore, government extension organizations will benefit from the results of the current study, which places a greater focus on content analysis of agricultural data for placing greater emphasis on the information supply in areas that are not as well-known and on areas that farmers have requested in accordance with perceived needs.

Materials and Methods

Among the most well-known farms is Agrowon, and the Agrowon daily newspaper was specifically chosen for the purpose of the research. The sample size used in the study was approximately 122 newspapers, which were chosen at random from the 3 years of June 1st, 2008 to May 31st, 2011. First, every newspaper issue was carefully examined, and the overall frequency and space addressed by information and advertisements (agricultural, horticultural, and non-agricultural) as well as the time covered by horticultural articles (fruits, vegetables, flowers, spices, and aromatic and medicinal crops) were measured in square centimeters. The figures are presented in terms of percentages and frequencies for easy comparison and to make significant inferences.

Content analysis of the information

It is a technique for both observation and interaction analysis. It is a flexible research method for both social science and human communication studies. Where conclusions can be drawn by methodical, scientific analysis of information collected from archival documents (Murthy, 1999)^[7].

Content analysis of the horticultural information

It refers to the analysis of the horticultural information appeared in the newspaper in terms of space covered, identification of major horticultural areas and allied areas, categorization of major and minor horticultural areas, content analysis of articles covering aspect such as production technology, post harvest technology, marketing and government policies

Space covered by the horticultural information

The space of the horticultural information is the actual size of the horticultural information as it appears in news and measured in terms of square centimeters. It was expressed in aggregate square centimeters for a particular news.

Types of horticultural information

Types or categories of horticultural information were made on the basis of package of practices of horticulture i.e. fruit crops, vegetable crops, flower crops, species, aromatic and medicinal crops. Following are the types of horticultural crop information.

Classification of flower crops on the basis of growth habit

i.	Shrubs	Rose, Jasmine
ii.	Bulbus	Jerbera, Orchids, Daliya, Gladiolus
iii.	Shade loving	Anthurium, Aster plants
iv.	Annuals	Aster, Merigold

The content analysis of flower crop information was done as per the following criteria

- Preparatory planting operations
- Intercultural operations
- Harvesting
- Farm mechanization
- Post harvest technology
- Marketing
- Govt. and SAUs policies
- Others

Illustrations used in flower crop information

- Presence or absence of illustrations
- Space occupied by the illustrations
- Description of the illustrations
- Types of illustrations used i.e. photographs, drawings, cartoons, graphs and charts.
- Colours used in illustrations

Results and Discussion

Articles published on horticultural information in Agrowon newspaper

The Horticulture is a heart of the agriculture. The horticulture is one of the major branch of the Agriculture. The horticulture is divided in sub-branches like fruits, vegetables flowers, spices, aromatic and medicinal plants. The frequencies and space covered of respective types were worked out which are represented in Table 9.

Table 1: Distribution of articles published on horticultural information in Agrowon newspaper

Sl.No.	Type of horticulturalInformation	Frequency(n = 893)	Spacecovered 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)

The data from table 1 delineates that among horticulture, fruit crop information topped (54.53 per cent), followed by vegetable crops (30.79 per cent), flower crops (7.73 per cent), spices crops (4.26 per cent) and aromatic and

medicinal crops (2.69 per cent) in terms of frequency. Regarding space covered by horticultural information, fruit crop information topped (56.54 per cent) on second rank vegetable crop information (29.50 per cent) and on third

rank flower crop information (7.84 per cent). It was followed by spices crop information (3.35 per cent) and Aromatic and Medicinal crop information (2.77 per cent). There is scope to increase the number of articles on Aromatic and medicinal crops and spices crops so that there will be all round in coverage of horticultural information in Agrowon. The finding was partially supported by Kayal (1975), Panhale (1993) [5, 8].

Distribution of cropwise flower crop information appeared in Agrowon newspaper

The horticultural information on flower crop was grouped into different types on the basis of growth habit. They were grouped under shrubs, bulbs, shade loving plants, annuals, climbers and general information on flower crops. The frequencies and space covered of respective types were worked out which are presented in Table 2.

Table 2: Distribution of cropwise flower crop information appeared in Agrowon newspaper

Sl. No.	Types of flower crop information	Frequency(n = 69)	Space covered in sq. cm.(n = 24251)
1.	Shrubs (Rose, Jasmine)	15(21.74)	4361(17.98)
2.	Bulbus (Jerbera, Orchids, Daliya, Gladiolus)	08(11.59)	2955(12.19)
3.	Shade loving plants (Anthurium, Aster)	-	-
4.	Annuals (Aster, Merigold)	02(2.90)	1247(5.14)
5.	Climbers	02(2.90)	510(2.10)
6.	General	42(60.87)	15178(62.59)
	Total	69(100.00)	24251(100.00)

It was revealed from table 2 that the frequency of articles on flower crops, general information on flower crops topped (60.87 per cent) to the total number of flower crop information. The shrubs crop stand on second position (21.74 per cent) and bulbs crop on third position (11.59 per cent). It was followed by annuals and climbers both were (2.90 per cent). There was no any article observed on shade loving plants so there is a need to give more attention on shade loving plants. Regarding space covered in square centimeter by flower crop information, general information on flower crops ranked first (62.59 per cent) followed by shrubs (17.98 per cent) on second rank and bulbs (12.19 per cent) on third rank. The other group like annuals (5.14 per cent) and climber (2.10 per cent) had less covered space to the total space covered by flower crop information. There was no space observed to shade loving plants even 1 per cent. Among space covered by cropwise flower crops in Agrowon shows general information on flower crops topped (62.59 per cent).

Distribution of cropwise flower crop information appeared in Agrowon newspaper

Distribution of cropwise flower crop information shows that the frequency of articles on flower crops, general information on flower crops topped (60.87 per cent) to the total number of flower crop information. The shrubs crop stand on second position (21.74 per cent) and bulbs crop on third position (11.59 per cent). It was followed by annuals and climbers both were (2.90 per cent). There was no any

article observed on shade loving plants so there is a need to give more attention on shade loving plants.

Regarding space covered in square centimeter by flower crop information, general information on flower crops ranked first (62.59 per cent) followed by shrubs (17.98 per cent) on second rank and bulbs (12.19 per cent) on third rank. The other group like annuals (5.14 per cent) and climber (2.10 per cent) had less covered space to the total space covered by flower crop information. There was no space observed to shade loving plants even 1 per cent. Among space covered by cropwise flower crops in Agrowon shows following results. On flower crop, general information on flower crops topped (62.59 per cent). These results indicate that Agrowon has given more information on flower crops in general and not cropwise so that it is necessary to give coverage on information in cropwise pattern. It is necessary to emerge the less covered and neglected crops and give attention to climber flower information.

The result of finding was supported by the findings of Kayal (1975) and Panhale (1993) [5, 8].

Distribution of package of practicewise flower crop information appeared in Agrowon newspaper

The flower crop information was grouped into different types on the basis of package of practices. The frequencies and space covered of respective types were worked out which are presented in Table 2.

Table 3: Distribution of package of practicewise flower crop information appeared in Agrowon newspaper

Sl. No.	Types of flower crop information	Shrubs		Bulbus		Shade loving plants		Annuals		Climbers		General		Total	
		Frequency	Space covered	Frequency	Space covered	Frequency	Space covered	Frequency	Space covered	Frequency	Space covered	Frequency	Space covered	Frequency(n=69)	Space covered (n=24251)
1.	Preparatory planting operations	04 (5.80)	902.75 (3.72)	04 (5.80)	1024 (4.22)	-	-	-	-	01 (1.45)	255 (1.05)	18 (26.09)	6354.75 (26.20)	28 (40.58)	8536.50 (35.20)
2.	Intercultural operations	01 (1.45)	325 (1.34)	01 (1.45)	360 (1.48)	-	-	01 (1.45)	690.25 (2.85)	-	-	04 (5.80)	1411.5 (5.82)	07 (10.14)	2786.75 (11.49)
3.	Harvesting	03 (4.35)	956 (3.94)	-	-	-	-	-	-	-	-	02 (2.90)	612 (2.52)	05 (7.25)	1568 (6.47)
4.	Farm mechanization	02 (2.90)	545 (2.25)	03 (4.35)	1571 (6.48)	-	-	-	-	01 (1.45)	255 (1.05)	04 (5.80)	1223 (5.04)	09 (13.04)	3594 (14.82)
5.	Post-harvest technology	-	-	-	-	-	-	-	-	-	-	02 (2.90)	910 (3.75)	02 (2.90)	910 (3.75)
6.	Marketing	01 (1.45)	433.5 (1.79)	-	-	-	-	01 (1.45)	556.75 (2.29)	-	-	05 (7.25)	2610 (10.76)	08 (11.59)	3600.25 (14.85)

7.	Government and SAUs policies	01 (1.45)	420.75 (1.73)	-	-	-	-	-	-	-	03 (4.35)	1187.25 (4.90)	04 (5.80)	1608 (6.63)	
8.	Others	03 (4.35)	778 (3.21)	-	-	-	-	-	-	-	04 (5.80)	869.5 (3.59)	06 (8.70)	1647.50 (6.79)	
	Total	15 (21.74)	4361 (17.98)	08 (11.59)	2955 (12.19)	-	-	02 (2.90)	1247 (5.14)	02 (2.90)	510 (2.10)	42 (60.87)	15178 (62.79)	69 (100.00)	24251 (100.00)

It was reported from table 3 that various types of package of practicewise flower crop information appeared in Agrowon. In package of practicewise, general information on flower topped (60.87 per cent) in terms of frequency. In this position preparatory planting operations was on first rank (26.09 per cent), marketing on second position (7.25 per cent) and on third position other information as well as farm mechanization (5.80 per cent). It was followed by less number of articles on remaining package of practices. In package of practisewise, on second position shrub crops (21.74 per cent), in this preparatory planting operations topped (5.80 per cent), followed by harvesting and farm mechanization (4.35 per cent) and other practices were neglected. Bulbs crop on third position (11.59 per cent) in terms of frequency. In this preparatory planting operations topped (5.80 per cent), followed by farm mechanization (4.435 per cent), intercultural operations (1.45 per cent) and no any articles on other practices.

Among package of practices annuals and climbers covered same articles (2.90 per cent) in terms of frequency. In annuals marketing and intercultural operations were (1.45 per cent), while in case of climber's preparatory planting operations and farm mechanization both were same (1.45 per cent). There were no any articles on remaining package of practices of annuals climber crops. On shade loving plants, there were no any articles; it was totally neglected in terms of frequency. The overall package of practices in terms of frequency, preparatory planting operations topped (40.58 per cent). It was followed by farm mechanization (13.04 per cent), marketing (11.59 per cent), intercultural operations (10.14 per cent), and other information (8.70 per cent). There was less number of articles on remaining practices. Regarding space covered in sq. cm. of flower group type general information topped (62.69 per cent). In this preparatory planting operation on first rank (26.20 per cent), on second rank marketing (10.76 per cent) and on third rank intercultural operations (5.82 per cent). It was followed by remaining practices having very less space.

Regarding space covered of flower group type, shrubs crops (17.98 per cent) was on second position. Among this harvesting topped (3.94 per cent) followed by preparatory planting operations (3.72 per cent) and other information (3.21 per cent). The remaining practices were neglected. In space covered of flower group type bulbs crops (12.19 per cent) was on third position. Among this farm mechanization topped (6.48 per cent). It was followed by preparatory planting operations (4.22 per cent) and intercultural operations (1.48 per cent). There were no any articles on remaining package of practices.

The coverage of annuals was 5.14 per cent. In these intercultural operations was topped (2.85 per cent). It was followed by marketing (2.29 per cent). Remaining practices were not covered. Very less coverage was observed on climber flower group types. The coverage of shade loving plants was not observed. The overall package of practices in terms of space covered, preparatory planting operations topped (35.20 per cent) followed by marketing (14.85 per cent) and farm mechanization (14.82 per cent). The remaining practices were covered less space.

Types, placement and colour of illustrations used in flower crop information appeared in Agrowon newspaper

The illustrations were grouped in types, placement, colour and without illustrations. The frequencies and space covered by respective types were worked out which are presented in Table 4.

Illustrations are useful for literate as well as illiterate persons and are easily understood by the readers. Table 3 shows that the frequency of types of illustrations, in photographs general information topped (36.84 per cent) followed by shrubs crops (22.37 per cent), bulbs (11.84 per cent) and less number of photographs used in shade loving plants i.e. 5.26 per cent and annuals 1.32 per cent. In charts, general information topped (13.16 per cent) and on other crops less number of charts was used.

Table 4: Types, Placement and Colour of illustrations used in flower crops information appeared in Agrowon newspaper

Sl. No.	Forms of presentation	Shrubs		Bulbus		Shade loving plants		Annuals		General		Total	
		Frequ-ency	Space covered	Frequ-ency	Space covered	Frequ-ency	Space covered	Frequ-ency	Space covered	Frequ-ency	Space covered	Frequ-ency	Space covered
1.	Type of illustrations											(n=76)	(n=5056)
a	Photograph	17 (22.37)	985 (19.48)	09 (11.84)	617 (12.20)	04 (5.26)	311 (6.15)	01 (1.32)	120 (2.38)	28 (36.84)	1669 (33.01)	59 (77.63)	3702 (73.22)
b	Chart	04 (5.26)	384 (7.59)	02 (2.63)	178 (3.53)	01 (1.32)	75 (1.48)	-	-	10 (13.16)	717 (14.18)	17 (22.37)	1354 (26.78)
2.	Placement of illustrations												
a	LULS	04 (5.26)	188 (3.72)	03 (3.95)	231 (4.57)	-	-	-	-	04 (5.26)	226 (4.47)	11 (14.47)	645 (12.76)
b	RURS	02 (2.63)	254 (5.02)	02 (2.63)	186 (3.68)	-	-	-	-	06 (7.89)	466 (9.22)	10 (13.16)	906 (17.92)
c.	Upper middle	05 (6.58)	386 (7.63)	01 (1.32)	42 (0.83)	02 (2.63)	142 (2.81)	01 (1.32)	120 (2.38)	07 (9.21)	381 (7.54)	16 (21.05)	1071 (21.18)
d	LLLS	02 (2.63)	138 (2.73)	02 (2.63)	163 (3.22)	02 (2.63)	164 (3.24)	-	-	07 (9.21)	520 (10.28)	13 (17.11)	985 (19.48)
e	RLRS	04 (5.26)	212 (4.19)	01 (1.32)	64 (1.26)	01 (1.32)	80 (1.58)	-	-	04 (5.26)	145 (2.87)	10 (13.16)	501 (9.91)
f	Lower middle	03	92	-	-	-	-	-	-	03	125	06	217

		(3.95)	(1.82)							(3.95)	(2.47)	(7.89)	(4.29)
g	Left middle	01 (1.32)	99 (1.96)	-	-	-	-	-	-	04 (5.26)	249 (4.92)	05 (6.58)	348 (6.88)
h	Right middle	-	-	02 (2.63)	109 (2.16)	-	-	-	-	03 (3.95)	274 (5.42)	05 (6.58)	383 (7.58)
3.	Colour of illustrations												
a	Black and white	03 (3.95)	167 (3.30)	01 (1.32)	125 (2.47)	02 (2.63)	164 (3.24)	-	-	05 (6.58)	359 (7.10)	11 (14.47)	815 (16.12)
b	Multicolour	18 (23.68)	1202 (23.77)	10 (13.16)	670 (13.25)	03 (3.95)	222 (4.39)	01 (1.32)	120 (2.38)	33 (43.42)	2027 (40.09)	65 (85.53)	4241 (83.88)
4	Without illustration	-	-	01 (12.5)	-	-	-	-	-	07 (87.50)	-	08 (100.00)	-

Regarding frequency of placement of illustrations, in general crops, upper middle and left lower left side topped (9.21 per cent) and so on. In bulbs crops, left upper left side topped (3.95 per cent). Other placements of illustration were less than 3 per cent. In shrubs, upper middle side topped (6.58 per cent), left upper left side (5.26 per cent), right lower right side (5.26 per cent). In shade loving and annuals very less frequency of placement of illustrations were used. As regards frequency of colour of illustrations, in general information multicolour topped (43.42 per cent) followed by black and white (6.58 per cent). Same picture was observed in other groups of crops. Regarding without illustration frequency, general information topped (87.50 per cent) to total number of without illustrations followed by bulbs (12.50 per cent). Regarding overall illustration frequency, in types of illustrations, photograph topped (77.63 per cent) followed by charts (22.37 per cent). In placement of illustrations, upper middle side topped (21.05 per cent) followed by left lower left side (17.11 per cent) and left upper left side (14.47 per cent). In colour of illustrations, multicolour topped (85.53 per cent) followed by black and white (14.47 per cent). As regards space covered by illustrations, in types of illustrations in photograph general information topped (33.01 per cent) followed by shrubs crops (22.37 per cent), bulbs (11.84 per cent). In chart, general information topped (13.16 per cent), shrubs (7.59 per cent). On remaining crop groups less than 4 per cent charts were used in terms of space covered. As regards space covered by placement of illustrations, in general information, left lower left side topped (10.20 per cent) followed by right upper right side (9.22 per cent). In shrubs crops upper middle side topped (7.63 per cent). In bulbs, left upper left side topped (4.57 per cent). In shade loving plants, left lower left side topped (3.24 per cent). In annuals less than 3 per cent space covered by placement because in annuals less illustration was used. Regarding space covered by colour of illustrations of flower crops, in general information multicolor topped (40.09 per cent) followed by black and white (7.10 per cent), same picture was observed in other groups of crops. Among overall space covered by illustrations of flower crops, in types of illustrations photograph topped (73.22 per cent) followed by charts (26.78 per cent). In placement, upper middle side topped (21.05 per cent) followed by right upper right side (17.92 per cent), left upper left side (12.76 per cent). In colour of illustrations, multicolour topped (83.88 per cent) followed by black and white (16.12 per cent).

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