

RESEARCH NOTE

Development and Standardization of e-Booklet on Dairy Farming

Rupender Kaur¹ and Rajendra Rathore²

1. Ph. D. Scholar, 2. Asstt. Prof. Department of Home Science Extension and Communication Management,
College Home Science, SKRAU, Bikaner (Rajasthan) India
Corresponding author e-mail: ext_rupender@rediffmail.com

ABSTRACT

The media is playing an important role in passing meaningful information at a faster rate to the large number of farm women in our country. It has emerged as one of the powerful source of seeking relevant scientific information by our farm women. Contribution of media in dairy farming is noteworthy but relatively little efforts have been made to disseminate the scientific know-how amongst the livestock owners in general and rural women in particular. With the technological breakthrough in animal husbandry, too much know-how is now available which needs to be transferred to the users to increase the milk production with the pace of progress and time. An e-booklet was developed on the selected messages related to dairy farming practices i.e. "Dairy evam Pashudhan Vikas". The developed e-booklet standardized on the quality parameters which were perceived quite high by a large majority of judges, e-booklet was found to be valid in terms of its content and format, which were found reliable and applicable in the field.

Key words: Farm women; Livestock; Dairy evam pashudhan vikas; e-Booklet;

In consequences, responsibility and intervention of media in rural transformation is becoming more imperative and challenging. Undoubtedly, contribution of media in dairy farming is noteworthy but relatively little efforts have been made to disseminate the scientific know-how amongst the livestock owners in general and rural women in particular. With the technological breakthrough in animal husbandry, too much know-how is now available which needs to be transferred to the users to increase the milk production with the pace of progress and time. Dairy farming among the Indian farm women is crucial and of significant importance. The vast majority of our farm women inhabiting in remote rural areas where facilities could not be arranged for sustainable individual or group approaches of technology transfer as it could be highly expensive and difficult in managing information infrastructure. The study has the practical utility and give a new light and also helpful to teach the women toward improved dairy farming. Thus, the present study was undertaken "To develop and standardize e-booklet on dairy farming".

METHODOLOGY

e-booklet was developed and standardized on dairy farming. The procedures for the Development and

standardization of e-booklet have been described as follows:

Development and standardization of e-booklet:

Deciding broad aspects of e-booklet on dairy farming : The major aspects of e-booklet were selected in consultation with the subject matter specialists on the basis of collected literature.

Preparing literature for e-booklet : For e-booklet literature was collected on selected aspects of dairy farming from books, internet, magazines, annual reports of dairy and journals. Content was selected in view of profile of respondents and requirements of the study.

Preparing illustrations for e-booklet : According to the topic and content, appropriate illustrations were selected for the e-booklet. Pictures were scanned and arranged according to the topic.

Standardization of e-booklet : Reliability and validity were determined to standardize the e-booklet on "Dairy evam Pashudhan Vikas", with the help of checklist on seven parameters. For the standardization of developed e-booklet total sample of 30 judges including Scientists, Professors and Subject matter specialists from various departments i.e. Home Science, Agriculture Extension, Veterinary, Dairy and computer field.

RESULTS AND DISCUSSION

Development of Electronic Booklet: The e-booklet related to dairy farming was developed by including 16 messages under the title of “*Dairy and Livestock Development*”. The front page of e-booklet was developed and designed by depicting the title, name of authors, name of the department and institute. The e-booklet consisted of total sixty-six pages, sixteen messages and sub messages with relevant information and related pictures and illustrations.

Standardization of e-booklet: Two major characteristics of a standardize tool are the reliability and validity of its items. The results of the study are presented under following sub-headings:

Validity of e-booklet: Validity indicates the accuracy with which the instrument measures what in intendents to measure. Content validity is partly a matter of determining if the content and format (Clarity of printing, size of typing, adequacy of work space) that the package contains is an adequate sample of the domain of concept it is supposed to represent (*Dhaka 2004*).

Content Validity Ratio for e-booklet Perceived by Judges.: Data indicate the value of the content validity ratio (CVR) for all attributes of content and format in terms of accuracy, objectivity, coverage, content presentation, writing style, illustrations and compatibility.

It was observed that for all the 16 messages covered in e-booklet, content validity ratio was found to be significant as calculated values exceeds the tabulated values ranging from 0.53 to 1.00 (As minimum acceptable value of CVR is 0.33 if the panelists are 30 in numbers).

Overall Content Validity Ratio for e-booklet : Table 3 reveals that the overall content validity ratio (CVR) values for e-booklet in terms of accuracy, coverage,

Table 1. An overview (Detailed outline) of e-booklet

Code	Title with Description
	Introduction - Concept & importance of dairy
M ₁	Breeds of milking animals - Cow’s and buffalo’s breeds
M ₂	Selection of milking animal - Important points
M ₃	Characteristics of best breed -Physical characteristics
M ₄	Age of animals - Methods of age determination
M ₅	Animal housing - Place for animal and cleanliness
M ₆	Feeding of animal-Nutrients and balance diet for animal
M ₇	Animal reproduction - Cross breeding and benefits
M ₈	Care of animal at calving - Precautions
M ₉	Care of dam and calf - Nutrition and physical health
M ₁₀	Clean milk production - Cleanliness of milking person, utensils and place
M ₁₁	Storage of milk - Important points for storage
M ₁₂	Milk products marketing - How to sale the milk and milk products
M ₁₃	Diseases - Animal diseases and their control
M ₁₄	Disease control - Prevention and vaccination against communicable diseases
M ₁₅	Loan for dairying - Loan for animal raring
M ₁₆	Insurance of animal - Insurance of animal for safety.

objectivity, content presentation, illustration, writing style and compatibility was perceived to be significant i.e.0.80 (*Solanki, 2009*)).

Table 3. Overall Content Validity Ratio (CVR) for e-booklet Perceived by Judges.

Attributes	CVR Values
Overall ratio of e-booklet for accuracy, objectivity, coverage, content presentation, writing style, compatibility and illustrations.	0.80

Thus, it may be calculated that all the attributes of content and format for all the messages were valid to be included in e-booklet and the judges approved the content and format for the entire message.

Table 2. Content Validity Ratio for e-booklet Perceived by Judges

Contents	Messages															
	M ₁	M ₂	M ₃	M ₄	M ₅	M ₆	M ₇	M ₈	M ₉	M ₁₀	M ₁₁	M ₁₂	M ₁₃	M ₁₄	M ₁₅	M ₁₆
Accuracy	0.80	1.00	1.00	1.00	1.00	1.00	0.80	0.73	1.00	1.00	0.80	0.80	0.80	0.93	1.00	1.00
Objectivity	0.86	0.73	0.93	0.93	0.93	0.73	0.86	0.93	0.93	0.66	0.66	0.66	0.60	0.60	0.66	0.60
Coverage	1.00	0.73	1.00	1.00	1.00	0.73	0.93	0.73	0.80	0.73	0.8	0.80	0.80	0.80	0.80	0.80
Content Presentation	0.93	0.66	0.93	0.73	0.93	0.93	0.80	0.86	0.86	0.86	0.73	0.66	0.73	0.73	0.93	0.73
Writing Style	0.53	0.66	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.73	0.73	0.93	0.66	0.86	0.86
Compatibility	0.80	0.60	0.86	0.93	0.93	0.93	0.66	0.93	0.80	0.86	0.73	0.73	0.80	0.80	1.00	0.66
Illustrations	0.86	0.53	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.66	0.66	0.66	0.53	0.86	0.66
Total CVR	0.88	0.70	0.92	0.90	0.93	0.86	0.83	0.81	0.87	0.83	0.73	0.72	0.76	0.72	0.87	0.77

Table 4. Reliability Coefficient of e-booklet Perceived by Judges

Attributes/ Reliability	Messages															
	M ₁	M ₂	M ₃	M ₄	M ₅	M ₆	M ₇	M ₈	M ₉	M ₁₀	M ₁₁	M ₁₂	M ₁₃	M ₁₄	M ₁₅	M ₁₆
AT and R	0.86	0.86	0.97	0.94	0.82	0.89	0.90	0.83	0.86	0.88	0.93	0.98	0.98	0.90	0.92	0.98

AT = Accuracy, objectivity, coverage, content presentation, writing style, compatibility and illustrations.

R = Inter consistency method (Split half technique)

Reliability co-efficient of e-booklet : Reliability refers to the consistency of the scores obtained. Inter consistency reliability was estimated and reported for e-booklet. Split half technique was used as a measure of inter consistency.

All the values of reliability coefficient were found to be statistically significant and it was showed in table-IV along with reliability values. It was found high for all the messages covered under e-booklet i.e. Breeds of milking animals (0.86), selection of milking animals (0.86), characteristics of best breed (0.97), Age of animals (0.94), Animal housing (0.82), Feeding of animal (0.89), Animal reproduction (0.90), care of calving animal (0.83), care of dam and calf (0.86), clean milk production (0.88), storage of milk (0.93), milk products marketing (0.98), Diseases (0.98), Diseases control (0.90), Loan for dairying (0.92) and Insurance of animal (0.98). All the values of reliability coefficient were found to be statistically significant. Calculated 'r' values (0.82-0.98) indicate high degrees of inter consistency towards various messages included in e-booklet.

Over all Reliability of e-booklet: Overall inter consistency reliability (0.74) as indicated in table-V for e-booklet was found to be statistically significant.

Thus, it might be concluded that inter consistency reliability for all the messages covered in e-booklet were significant which shows that all the attributes of content and format were found to be suitable to be included in the e-booklet.

Table 5. Overall Reliability of e-booklet Perceived by Judges

Attributes	Reliability Coefficient
Overall ratio of e-booklet in terms of accuracy, objectivity, coverage, content presentation, writing style, compatibility and illustrations.	0.74

CONCLUSION

An e-booklet was developed on the selected messages related to dairy farming practices. Developed e-booklet standardized in items reliability and validity. The quality parameters of e-booklet were perceived quite high by a large majority of judges, e-booklet was found to be valid in terms of its content and format, which were found reliable and applicable in field.

Paper received on : November 11, 2011

Accepted on : June 11, 2012

REFERENCES

- Dhaka, S. (2004). Development and testing of Health and Sanitation Messages for school children. M.Sc. Thesis (unpub.), CCSHAU, Hisar, Haryana.
- Dharmappa, H.B., Corderoy, R.M. and Hagare, P. (2000). "Developing an interactive multimedia software package to enhance understanding and learning outcomes in water treatment processes". *J. of Cleaner Production*, **8** (5) : 407-411.
- Jain, V. (2005). Development and Standardization of Media Package on Animal Husbandry practices for rural women of Haryana. Ph.D. Thesis (unpub.), CCSHAU, Hisar, Haryana.
- Kaur, M. (1999). Developing an educational package on sex education for urban adolescent boys. M.Sc. Thesis (unpub.), SK Rajasthan Agriculture University, Bikaner.
- Shukla, N. (2008). Development of distance education package on value added products from fruits and vegetables. M.Sc. thesis (unpub.), Department of Home Sci. Ext. and Communication Management, COHSc., SK Rajasthan Agricultural University, Bikaner.
- Solanki (2009). Development a modular multimedia package on female foeticide. Ph.D. thesis (unpub.), Department of Home Sci. Ext. and Communication Management, COHSc., SK Rajasthan Agricultural University, Bikaner.

