



Communication Factors Affecting Knowledge and Attitudes in Empowering Dairy Farmers in West Java, Indonesia

Natalina Nilamsari^{a*}, Amiruddin Saleh^b, Musa Hubeis^c, Nurmala K Pandjaitan^d

^a*Communication Faculty of Prof.Dr. Moestopo (Beragama) University, Jakarta, 10270*

^{b,c,d}*Human Ecology Faculty of Bogor Agricultural University, 16680*

^a*Email: natalinanilamsari@yahoo.com*

^b*Email: amiruddin_ipb@yahoo.co.id*

^c*Email: hubeis.musa@yahoo.com*

^d*Email: nurmala_katrina@yahoo.co.id*

Abstract

Communicating process of the company's commitment on social and environmental aspect to the stakeholders is called Corporate Social Responsibility (CSR) communication. CSR communication could be considered as a way the company delivers special messages to its stakeholders specially through communication channel to achieve CSR goal i.e. empowerment the beneficiaries. CSR practices that had performed by companies in Indonesia have not shown results significantly in term of community empowerment. This study was intended to analyze the effectivity of the CSR communication factors conducted by Dairy Processing Industry on dairy farmer's empowerment on Pangalengan, West Java. Survey and simple regression analysis were used as research method. This research had sampled 220 dairy farmers as respondents that received CSR program.

* Corresponding author.

The result indicated that: a) factors that significantly influenced the knowledge and attitude of the farmers were: farmer's characteristic, external factor, CSR communicator's capacity, information quality, communication channel; b) CSR communicator capacity, information quality and communication channel were significantly influenced the dairy farmer's empowerment on Pangalengan.

Keywords: corporate social responsibility communication; dairy farmer; empowerment.

1. Introduction

Several models of CSR activities in Indonesia conducted by (1) the company directly to the beneficiary communities; (2) foundations or charitable organization formed by a group of companies; (3) collaboration with third parties; (4) a consortium of several companies [2,3]. The realization of CSR activities may include social activities promotion, where companies provide funds or other resources to raise public awareness of a social activity, with a focus on persuasive communication [8]. Other programs that can be provided by the company is giving employment opportunities for the people residing around the company, provision of health and educational facilities (buildings and teachers), soft loans, scholarship Dairy Processing Companies and construction of worship places [1]. However, CSR practices that has been committed by companies in Indonesia revealed no statistically significant results, especially when associated with economic empowerment [19,26]

Important factors related to CSR's success is effective communication. Communication is recognized as a very important factor for CSR since it has become known as a key issue of concern for companies [2,27]. Communication is an important factor affecting the image, reputation and relations between companies and stakeholders [6]. Communication is said to be effective if impacts: (1) cognitive, increasing knowledge; (2) affective, changes in attitudes due to communication, and (3) conative, changes in behavior or action [5]. CSR-related communication effectiveness, reference [25] examined the communication channel used CSR of food companies in Japan: (1) factory visit program; (2) healthy food education programs; (3) reporting of CSR activities. Some authors state that effectiveness measure of communication can be seen from the indicators of perception of communication on interest, interest rate, the amount of information received and the level of media usage.

According to [2,27] the way companies deliver their CSR activity can be seen on: (1) informative message; (2) communicator credibility; (3) a third party as an endorser; (4) the involvement of stakeholders; (5) media / communication channels. Thus it can be said that CSR communication is the way companies deliver a specific message to a special stakeholders through communication channels in order to achieve CSR goals to empowering the beneficiaries. Author in [16] stated that stakeholder companies are categorized into four groups: (1) business partners (employees, suppliers, distributors, service providers); (2) the customer; (3) regulator (shareholders, top management, government, banking); (4) external parties affected (journalist / media, NGOs, community members, community leaders). For dairy processing company in Indonesia, dairy farmers as suppliers are important stakeholders for their sustainability, as well as become beneficiary from the CSR program. Based on the opinion of [2,27] theory of stakeholder response strategies may be invoked to examine the CSR communication with asymmetrical models of two way communication between the company and its

stakeholders.

There are many different working relationship in Dairy Processing Companies that take place in communication process between the company and stakeholders. During this time, there has been a close relationship between dairy processing companies and the farmers. One of the potential way of doing this relationship is through a Corporate Social Responsibility (CSR). Company's CSR program can directly help the dairy farmers. The company claimed to committed in such an effort to implement CSR to the responsible dairy farm systems, provision of sustainable supply chains, as well as the development of the dairy production process with defined communication strategy through the Dairy Development Program [13]. In particular for the empowerment of dairy farmers, the company said that they set up a sustainable CSR program and long-term commitment to develop dairy industries in Indonesia. The CSR that carried out by dairy processing company is unique because it's directly related to the company's products. At the same time, the dairy farm is still dominated by local farm, although it can not precisely referred as peasant since the main production of the business is almost all sold, but not yet fully be referred as farmers because most of them do not have adequate ability in mastering and implementing technical aspects of farming as well as in decision-making to achieve the success of their business. Therefore we need targeted efforts to change the behavior of farmers who are still characterized by traditional farmers to the modern dairy farmers [30].

On the other hand, the development of dairy farming in Indonesia aims to increase dairy production in our country in anticipation of high demand for dairy. This situation opens an opportunity for farmers, especially local farm to increase their production so as to reduce dependence on imported dairy. In logical consequences, the existing dairy farm will be required in order to support the supply process of dairy production and maintain the farmer's viability [10,22]. Indonesia's dairy farm and dairy processing industry are concentrated in Java, particularly in West Java and East Java, where the production of fresh dairy reaches 98% of the total national production, while the remaining 2% is produced by other provinces [4,14]. Advancement opportunities of agribusiness's dairy in Indonesia is wide open. Head of the Department of Animal Husbandry of West Java mentions that demand for dairy is increasing due to the growth of Dairy Processing Industry. Well-improved Dairy Processing Industry itself happens because of the increase in new industries and their production capacity. However, dairy production in our country has not been able to meet the increased demand [4].

Based on the foregoing, it is necessary to conduct a study to measure the effectiveness of CSR communication from the perspective of beneficiaries. Therefore, this study intended to: (1) analyze the influence of the farmers characteristics, external factors, the capacity of the communicator, the quality of information and communication channels on the effectiveness of CSR communication (2) analyze the effect of the characteristics of farmers, external factors, the capacity of the communicator, the quality of information and communication channels to the empowerment of dairy farmers in Pangalengan.

2. Limitation

This study does not take into consideration of other factors beside communication factor that may affect dairy farmer's empowerment. At the same time, the concept of empowerment in this study only examined in relation

to improve competencies, information and productivities.

3. Research methodology

Combine survey methodology was used for this research to explain (explanatory research) and describe (descriptive research), carried out in three places of Tempat Pelayanan Koperasi (TPK) in KPBS Pangalengan namely Los Cimaung, Warnasari and Rancamanyar. The study was conducted from December 2015 to February 2016. The population in this study is 401 people of the dairy farmers who have received CSR program.

The 220 people of research sample are determined based on the table of authors in [19]. Probability sampling method was used with proportional random sampling technique. Primary data were collected from questionnaires filled out by respondents. Secondary data were obtained from in-depth interviews with the corporate communications department that support CSR, publications, documentations and explanations from the relevant authorities. Data obtained from the questionnaires were processed in the excel program through the process of editing, coding and cleaning. Simple regression analysis was used to analyze the influence between variables.

4. Results and discussion

4.1. Characteristics of Respondents

Table 1 shows the characteristics of respondents by age, gender, education, experience in dairy farms, business scale and cosmopolitan. Age of the respondents are in adult category (47.3%) with age range from 18 to 75 years old. The average age the farmers is 43.35 years old. Based on the studies, 50.9 percent of respondents with low education (elementary school). Data from Pangelengan also showed that the number of population by educational attainment, are at primary school level / equivalent number of 53 892 people. This means that the level of education in Pangalengan in general is still low.

Based on farming experience, 63.6 percent of respondents had a long-time experience as dairy farmers (≥ 11 years). This is because farm businesses in Pengalengan are intergenerational. If the parents have dairy farm, the children will carry on their parents' business and have their own dairy farms.

Based on business scale, 62.2 percent of farms included in small-scale (1-5 units of livestock). Author in [30] mentions that dairy farm ownership in Indonesia is low at 3-4 livestock units / households. It shows that even Pengalengan is known as the center of a dairy farm, but most of the people are local farmers. Because it is relevant for the Dairy Processing Company to take responsibility to empower dairy farmers in Pengalengan. Most of respondents cosmopolitan are in high category (90.4%). Cosmopolitan level is the individual orientation to the outside of the social system with a wider interpersonal relationship Dairy Processing Companies.

In this study cosmopolitan seen by respondents as activity outside the village to establish contact with the other community outside theirs, receive or meet guests from outsider who have goals related to dairy farm. Pangalengan region known to be the location of practice fields for students from several universities in West Java.

Table 1: Description of the farmers characteristics as recipient of CSR Program in Pangalengan, 2016

Farmers Characteristics	Measurement Category	Quantity (people)	Percentage (%)
Age	Young (18-35 years old)	73	33.2
	Adult (36-55 years old)	104	47.3
	Old (≥ 56 years old)	43	19.5
Gender	Male	183	83.2
	Female	37	16.8
Education	Not completed Elementary School	20	9.1
	Elementary School	112	50.9
	Junior High School	61	27.7
	High School	23	10.5
	University	4	1.8
Farming Experiene	Recent (1-4 th)	23	10.5
	Enough (5-9 th)	41	18.6
	Long-time (≥ 10 th)	156	70.9
Business Scale	Small (1-5 ST)	137	62.2
	Medium (6-10 ST)	70	31.8
	Big (≥ 11 ST)	13	6.0
Cosmopolitan	Low	40	18,1
	Medium	71	32.4
	High	109	49.5

Source: Primary Data, 2016

n= 220

4.2. Communication Factors in Empowering Dairy Farmers in Pangalengan, West Java, Indonesia

Table 2 shows the effect between studied variables. Individual characteristics have a statistically significant effect on the CSR communication effectiveness on knowledge and attitude indicator. Educational factors,

business scale and cosmopolitan also have significant effect on the effectiveness of communication on the farmers' attitude indicator. This means that although the level of education is low, farmers have enthusiasm and passion in dairy farm. Business scale and cosmopolitan have significant effect on the effectiveness of communication on indicators of farmers knowledge.

This means that even they have small business scale but they have sufficient knowledge about the feeding, stables and livestock hygiene techniques and udder health techniques.

This is due to their experience and habit in a long time process. Similarly, although they are only small-scale farmers but they have adequate knowledge about the ranch. Also, although they have low education and small-scale business, but the respondents have a high level of cosmopolitan. This may be an argument about their livestock knowledge and enthusiasm and eager.

At the variable external factors known to very significant effect on the effectiveness of communication. Local governments support in providing animal health center facilities has significant effect on the enthusiasm and spirit of the farmers. Authors in [2,27] stated that government support in the provision of concentrate feed is strongly necessary. Variable capacity communicator significant effect on knowledge and attitudes of farmers. Factors credibility, attractiveness and ability to motivate of CSR communicators determine the effectiveness of communication.

In line with author in [18] refer to the ability of communicators attract mastery of the material can be qualified, neat and easy to get along. Variable quality of CSR information significant effect on knowledge and attitudes of farmers. Quality information is information according to the communicant desire for value point (relevant), there is a novelty on the nature of the content of the information, reliable, easy to understand and help resolve the problems facing farmers.

Variables of CSR communication channels have significant effect on the attitude of the respondent. No mass of media channels used by dairy processing companies is interpersonal communication and group communication. While the mass mediated communication used by dairy processing companies is a tabloid *Bewara*, broadcast radio program on *Radio Kosmo Bewara Bandung* and *Bewara TV* program broadcast by *TV Bandung*. The results showed that mediated communication channel has no effect on knowledge and attitudes of respondents. This is because broadcast on radio and television is not often, one time in a month.

As for the influence of the characteristics, the capacity of the communicator, the quality of information and communication channels towards the empowerment of farmers presented in Table 3. Indicators of business scale and cosmopolitan very significant effect on increasing mastery of information and increase the productivity of dairy. Capacity communicator consisting of credibility, attractiveness and ability to motivate highly nyat effect on improving the competence of farmers, increasing mastery of information and increased productivity. Author in [28] called a good communicator credibility means that he is trustworthy, competent, and having good faith. Communicators also have to create attraction (attractiveness) in the form of mastery of the material qualified, tidy and easy to get along [18] communicator that is credible, trustworthy, has a charm and capable of

motivating an important element that must be considered by companies when communicating CSR to beneficiaries , The success of CSR program marked by the successful communication of the communicator. This is partly also because of Dairy Development Program which is a dairy processing company's CSR program for dairy farmers has been conducted since 2009 until 2016 when this study was undertaken.

Similarly, the variable quality of the information very significant effect on the empowerment of farmers. This means that information on techniques feed, stables and livestock hygiene techniques and techniques udder health were sent by the CSR was successful. This is in line with the research conducted by [20].

From this research, it can be said dairy farmers stating the quality of information delivered to them on techniques for feeding, cleaning the cage, animal hygiene and techniques already good udder health. The content of this information prepared by the dairy processing companies assessed in accordance with the needs of dairy farmers beneficiaries of CSR.

Table 2: Effect of characteristics, external factors, capacity, quality of information and communication channels on the effectiveness of communication

Variables	Communication Effectiveness	
	Knowledge	Attitude
Farmers Characteristics	0.087**	0.087**
Education	0.017	0.039**
Business Scle	0.062**	0.108**
Cosmopolitan	0.309**	0.270**
External Factors	0.026*	0.041**
Support for Local Authorities	0.017	0.042**
Physical Environment	0.020*	0.014
CSR Communicator Capacity	0.512*	0.526**
Credibility	0.450**	0.474**
Attractiveness	0.438**	0.453**
Ability to Motivate	0.471**	0.471**
Information Quality	0.322**	0.305**
Relevance	0.503**	0.463**
Novelty	0.381**	0.316**
Trustworthy	0.185**	0.179**
Accessible	0.157**	0.173**
Solve the Problem	0.078**	0.080**
Communication Channel	0.027*	0.055**
No Mass Media Channels	0.039**	0.069**
Mass Media Channel	0.006	0.064

**significant at ≤ 0.01 * significant at ≤ 0.05

Table 3: Effect of characteristics, capacity, quality of information and communication channels to empower, 2016

Variables	Empowerment		
	Increased Competence	Improved information control of	Increased productivity of dairy
Farmers Characteristics	0.002	0.086**	0.012
Business Scale	0.021	0.040**	0.074**
Cosmopolitan	0.059**	0.204**	0.040**
Communicator Capacity	0.130**	0.519**	0.069**
Credibility	0.114**	0.412**	0.086**
Attractiveness	0.128**	0.496**	0.064**
Able to Motivate	0.104**	0.466**	0.040**
Information Quality	0.072**	0.222**	0.171**
Relevance	0.102**	0.386**	0.086**
Novelty	0.080**	0.259**	0.074**
Trustworthy	0.031**	0.109**	0.165**
Accessible	0.052**	0.130**	0.157**
Ability to solve the problem	0.020**	0.041**	0.145**
Communication Channel	0.028*	0.014	0.119**
No Mass Media Channel	0.006	0.022*	0.089**
Mass Media Channel	0.040**	0.002	0.072**

**significant at ≤ 0.01 * significant at ≤ 0.05

The mass of media channels has no significant effect on the increase in the dairy productivity, while the mass of media channels very significant effect on improving the competence of farmers and of enhancing the productivity of dairy. According to Rogers [17], there are two kinds of communication channels to convey messages, namely agricultural development of mass media channels and interpersonal channels. Authors in [12,15] added a communication channel groups in penyampaikan message development. Communication channels used by dairy processing companies are grouped into channels consisting of not mediated interpersonal communication channels and channel groups; and channels of media consisting of tabloid Bewara, Cosmo radio broadcasts in Bandung, Bandung and broadcast on television.

Author in [24] mentions the low level of livestock productivity is partly due to lack of knowledge and skills of farmers relating to the production, feeding, management of post-harvest results, the application of the recording system, dairying, sanitation and disease prevention. In this case CSR dairy processing company has endeavored to meet the needs of dairy farmers about the knowledge of feeding, hygiene and disease prevention through

engineering mastitis udder health.

5. Conclusions and suggestions

This study showed that CSR qualified communicators means someone with high level of credibility, attractiveness and capable of motivating the effectiveness of CSR communication and empowering the dairy farmers in Pangalengan. The study also found that the quality of information affects the effectiveness of CSR communication. Quality information is information that is relevant / appropriate to the needs of beneficiaries, have the nature of a novelty for beneficiaries, reliable, easy to understand and help solve problems faced by beneficiaries. Quality information also affects the empowerment of farmers in terms of increased competence trying to livestock, increased mastery of information and increased productivity of livestock.

The use of mass mediated communication channel does not affect the effectiveness of CSR communication. Knowledge and attitude of farmers is determined by the use of mass communication channels are not mediated interpersonal communication channel and communication channel group. Similarly, the empowerment of farmers in terms of increased competence trying livestock, increasing mastery of information and increased productivity of livestock were also formed by the use of mass communication channels are not mediated. While the use of mass media channels through the tabloids, radio and television did not affect the effectiveness of communication but affects the empowerment of farmers in terms of increased competence trying livestock, increasing mastery of information and increased productivity of livestock.

This study may suggest for Dairy Processing Companies to maximize mass media communication channels such as the use of tabloids, radio, and television. For local government, especially Veterinary Office of South Bandung District, to increase support such as contribute to product exhibition activities in some regions and allow farmers with excellent performance and productivity to participate in these activities.

References

- [1] Cangara H. 2013. *Perencanaan dan strategi komunikasi*. Jakarta (ID): Rajawali Pers.
- [2] Capriotti P, Moreno A. 2007. Corporate citizenship and public relations: the importance and interactivity of social responsibility issues on corporate websites. *Public Relations Review*. 33:84-91.
- [3] Chaudri V, Wang J. 2007. Communicating corporate social responsibility on the internet: a case of the top 100 information technology companies in India. *Management Communication Quarterly* 21 (2): 232-247.
- [4] [Disnak Prov. Jabar] Dinas Peternakan Provinsi Jawa Barat. 2013. *Produksi susu belum penuhi permintaan industri*. <http://www.disnak.jabarprov.go.id/index.php/subblog/read> [diakses 12 September 2014].
- [5] Effendy OU. 2007. *Ilmu Komunikasi: Teori dan Praktek*. Bandung (ID): Remaja Rodakarya.

- [6] Etter M. 2013. Reasons for low levels of interactivity (non) interactive CSR communication in twitter. *Public Relations Review* 39 : 606-608.
- [7] Gozali DM. 2005. *Communication measurement. Konsep dan aplikasi pengukuran kinerja public relations*. Bandung (ID): Simbiosis Rekatama.
- [8] Kottler P, Lee N. 2005. *Corporate Social Responsibility: Doing The Most Good for Your Company and Your Cause*. New Jersey (US): Willey Publisher.
- [9] Krejcie RV, Morgan DW. 1970. Determining sample size for research activities. *Educational and Psychological Measurement*. 30:607-610
- [10] Haloho RD, Santoso SI, Marzuki S. 2013. Analisis profitabilitas pada usaha peternakan sapi perah di Kabupaten Semarang. *Ragam Jurnal Pengembangan Humaniora*. 13(1):65-72.
- [11] Madrie. 1986. *Beberapa faktor penentu partisipasi anggota masyarakat dalam pembangunan pedesaan*. [disertasi]. Bogor (ID): Program Pascasarjana Institut Pertanian Bogor.
- [12] Matindas K, Hubeis AVS, Saleh A. 2010. Saluran komunikasi kelompok berbasis gender pada komunitas petani sayuran organik (Kasus di Megamendung Kabupaten Bogor Provinsi Jawa Barat. *Jurnal Komunikasi Pembangunan*. 8 (1):90-102.
- [13] Nilamsari N. 2015. Strategi komunikasi corporate social responsibility PT Frisian Flag Indonesia. *Wacana. Jurnal Ilmiah Ilmu Komunikasi*. 14 (4):325-339.
- [14] Priyanti A, Rindayati W, Rumagit GAJ 2004. Dampak penerapan kebijakan industri susu terhadap kesejahteraan masyarakat. *Wartazoa*. 14 (2):79-92.
- [15] Purwatiningsih SD, Dahlan S. 2015. Communication strategy for better understanding community on conservation forest at National Park Halimun Salak. *International Journal of Bussiness and Social Science*. 6(2):107-112.
- [16] Robert S. 2003. Supply chain specific? Understanding the patchy success of ethical sourcing initiatives. *Journal of Business Ethics*. 44:159-170.
- [17] Rogers EM. 2003. *Diffusion of Innovations*. Fifth Edition. New York (US): Free Press.
- [18] Sartika A. 2015. Strategi komunikasi Komisi Penanggulangan AIDS (KPA) dalam melakukan sosialisasi HIV/AIDS di Kota Samarinda. *E-Journal Ilmu Komunikasi* 3(1):17-30. [diakses 18 april 2015]
- [19] Siregar CN. 2007. Analisis sosiologis terhadap implementasi corporate social responsibility pada masyarakat Indonesia. *Jurnal Sosioteknologi* 12 (6):283-288.

- [20] Situmeang I, Lubis DP, Saleh A. 2012. Bentuk komunikasi organisasi melalui kegiatan tanggungjawab sosial perusahaan (Kasus PT Pertamina Refinery Unit VI Balongan). *Jurnal Komunikasi Pembangunan*. 10(1):27-46
- [21] Solimun. 2002. *Multivariate Analysis Structural Equation Modelling (SEM), Lisrel dan AMOS*. Malang (ID): Universitas Brawijaya.
- [22] Suherman D. 2008. Evaluasi penerapan aspek teknis peternakan pada usaha peternakan sapi perah sistem individu dan kelompok di Rejang Lebong. *Jurnal Sains Peternakan*. 3(1):35-42.
- [23] Susiloadi P. 2008. Implementasi corporate social responsibility untuk mendukung pembangunan berkelanjutan. *Jurnal Jurusan Administrasi Negara FISIP Universitas Negeri Sebelas Maret Surakarta*. 4(2):123-130.
- [24] Swastika DK, Manikmas MOA, Sayaka B, Kariyasa K. 2005. *The Status and Prospect of Feed Crops in Indonesia*. Bangkok (TH): Economic and Social Commission for Asia and the Pacific United Nations
- [25] Takano K. 2013. Communicating CSR: case study of Japanese food industry. *International Journal of Business and Management*. 8 (9):111-121.
- [26] Thamrin H, Syafganti I, Rangkuti B. 2010. Implementasi corporate social responsibility berbasis modal sosial di Sumatera Utara. *Journal of Strategic Communication*. 1 (1): 76-89.
- [27] Tomaselli G & Melia M. 2014. The role of interactive technologies for CSR communication. *Journal of International Scientific Publication*. 8:324-340.
- [28] Umeogu B. 2012. Source credibility: A philosophical analysis. *Open Journal of Philosophy*. 2(2):112-115. <http://www.SciRP.or/journal/ojpp>. [diakses 18 April 2015]
- [29] Wibisono Y. 2007. *Membedah Konsep dan Aplikasi CSR: Corporate Social Responsibility*. Gresik (ID): Fascho Publication.
- [30] Yunasaf U. 2006. Hubungan fungsi-fungsi koperasi dengan keberdayaan peternak sapi perah. *Jurnal Ilmu Ternak*. 6 (2):150-157