

SOCIO ECONOMIC CHARACTERISTICS AS DETERMINANTS OF CATTLE FARMER INFORMATION EXPOSURED

(A Case Study in Sundamekar, Sumedang)

Trijaya, I.A., R.W.E. Lumintang & D.U. Wardhani
Faculty of Animal Science, Bogor Agricultural University

ABSTRACT

Recently cattle farm in rural area is still being managed traditionally by utilising a simple technology. Therefore an effort to diffuse cattle technology information among farmer should be realised by providing several information sources either mass-media or directly communication channel. It is an inevitable problem how to outreach such information to the remoteness village. Face to face communication media appeared to be an important source to overcome such problem. This study is focused on how socio economic characteristics effectively determined cattle farmer exposure to information through directly communication media. The main socio economic characteristic components that are determined cattle farmer exposures were animal farm size and farmer age. The more frequent to communicate with extension worker, group leader and other farmer, tended to be the higher animal farm size and the younger farmer age. Among the socio economic components there are a quite relationship, such as family working hour and animal farm size, income and land owning. The increasing family working hour was inclined to increasing animal farm size as well as their income. This condition is also indicated the widen land owning.

Key words: Farmer socio economic characteristics, Communication cattle innovation, and rural cattle farmer.

INTRODUCTION

Recently cattle farm in rural area is still being managed traditionally by utilizing a simple technology. Therefore an effort to diffuse cattle technology information among farmer should be realized by providing several information sources either mass-media or directly communication channel. Todd (1996) noted that farmer have a better understanding of the issues and also have a better socio economic circumstances. Hume (1996) concluded that higher income farmer have more information about market conditions and can take more risk without threatening their minimum needs for survival. Now, is an inevitable problem how to outreach such information to the remoteness village? Face to face communication media appeared to be an important source to overcome such problem.

So far, most studies on dissemination of innovation are limited to finding the socioeconomic factors. Those studies stress the importance of education, income, and landholding etc. but also change agents. However, at the initial stage of innovating economic activities such socioeconomic and human factors are desperate obstacles to both small farmers and landless farmers. Rutherford (1995) and Wright (2000) argue that for the poorest households the opportunities of using loans are limited due to the risk of not being repayable on a weekly basis, that is less creditability, being unacceptably high.

Now, how to outreach institutional services to the poor farmer is an inevitable task with risk being a

given condition. Especially, there are reported the positive impact of institutional credit to income (Hendrick-Wong *et.al.*, 1997) and the empowerment of the poor by micro finance services (Wright, 2000). Like Peruse (1996) said that the group approach has enabled the bank to expand the service outreach to the poor depositors by 40%, for instance, intermediary processes, through which farmers can properly receive information and are motivated to act, are key factors indeed to better outreach. In other word, interaction among the entities concerned and their subjective interests are given and the consequent features can be influential to institutional services outreach to the poor. As a matter of fact, is sought the improvement of communication structure, whereby the poor can be facilitated to efficiently access to resources and information. Now, regardless improving either merits or demerits, the task is to properly conceive the communication and its background networks of farmers in rural areas.

Thus, the study is focused on salient features of socio economic characteristics and its components effectively determined cattle farmer exposure to information through directly communication media.

MATERIALS AND METHOD

Socio economic characteristics consist of a wide variety of components. Herein, the components are defined from several aspects: age, farm sizes, land owning width, total income, credit application, and, family working hour employed. Samples size was 40

cattle farmer in Sundamekar village, Sumedang, West Java. Questioner survey was conducted by the way of interviewing them in 1996. Matrices correlation was applied to test the relationship between variables.

Table 1 shows the locational condition of Sundamekar, Sumedang, where the most populated cattle farming in West Java.

Table 1. Locational Conditions of Sundamekar Village

1.	Height above sea level	5,00 metre
2.	Rainfall	2,324 mm
3.	Distance from Sumedang	29 km
4.	Transportation condition	Worse
5.	Population	1,633 people
6.	Age averaged	15 - 54 year (60.22 %)
7.	Occupation	Farmer (60.98 %)
8.	Width	6.31 square km
9.	Cattle population	3,00 head

Source: Sundamekar Rural Statistics. 1996.

RESULT AND DISCUSSION

Cattle Credit in Sundamekar

Cattle credit was aimed: (1) to increase cattle production as well as its population; (2) to improve farmer income and their nutrition; and (3) employment distribution. Sources of credit were (a) National budget, (b) Provincial budget, and (3) presidential support. However, all the credit types was Sumba contract --- meant that the credit was in cattle.

Sumba contract system was offered 2 head cattle aged 18 month. The cattle were obliged to repay within 5 year in herd (younger cattle). Cattle breeds were Sahiwal cross, Brahman cross, and Ongole cross.

Procedure to apply credit was: farmer applied to Livestock office (Dinas Peternakan) through group leader, he submitted the applications to the head of village (lurah). Co-operatively, the head of village submitted the application to livestock office in Sumedang.

Benefit of the credit, as being testified by farmer, was 1) to increase income, 2). To support educational cost 3). As a labour in paddy field, and 4) occasionally need.

Behaviour of Farmers to Extension Worker

Von Blacken Burg (1990) showed that information or knowledge dissemination tended to be a two-way communication flow, wherein the top-down flow was stronger than the upward flow from farmer to communication agent or channels. It was nowhere fully realised and recognised, especially in developing country.

Figure 1. Shows behaviour of farmers to extension worker as communication channels. Chi-square test is used to identify the statistically significant difference between active and passive approach to extension worker as intermediaries of information. It could be summed up as follows:

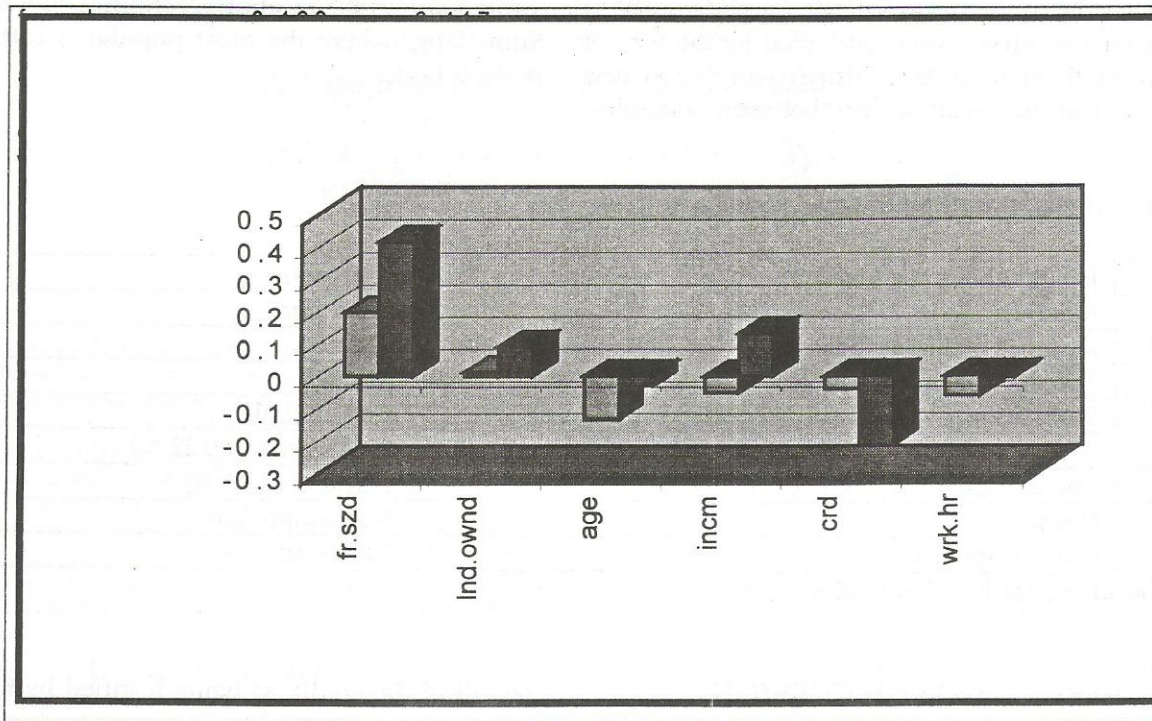


Fig. 1. Correlation between socio-economic and extension worker.

Description:

1. Fr.szdz = farm sized
2. Lnd.ownd. = Width of land owned
3. Age = farmer age
4. Incm = income
5. Crd. = credit applied
6. Wrk.hr. = family working hour employed

Firstly correlation is frequency to visit extension worker

Secondly correlation is frequency of being visited by extension worker

Farmers were more approached to extension worker instead of being approached by extension worker. Credibility of information was likely to be the main reason for such being active. As to extension worker as an institutional agent, farmers' approach is active.

So as to attain a credit, part of communication channels must function to persuade farmers or delete their anxiety. According to Rogers (1983), the stage of persuasion is to receive and perceive messages. It is said that before being persuaded to do something along the messages, that is making a decision, the following must be met as requirements: 1) Consciousness of comparative advantage; 2) compatibility of the innovation in the context of farming system; 3) complexity of the degree to which the innovation is perceived to be difficult to understand and use; 4)

non-sequential trial in regard to the degree to which it can be subjected; 5) absorbability of the innovation and its effect.

In the case of cattle credit, these requirements would be judged as follows; 1) Extent of consciousness, kind of comparative advantages, and evidence of being "high"; 2) The credit which is compatible to other technical information; 3) the credit is a package which are tested at farms in which mentioned about "non-consequential trial"; 4) the procedure is uncomplicated from the view point of farmer in which mentioned about "complexity"; and 5) the absorbability of effects at farms is likely to be high. Therefore, the credit is neither a simple message nor is diffused to farmers. In other words, the intermediaries as agents are key persons of communication channels

to encourage farmers and get them understand what the credit is.

However, whether or not farmers apply for the credit is solely another item. The decision is made after the persuasion stage. At the moment, the above-mentioned five requirements are taken into account. Credit can fulfil only two of them. So, farmers make the consideration carefully and they repeatedly discuss and consult with available communication, so that they would make an acceptable decision to apply for the credit. Even though they have disappointing experiences sometimes, however, some relevant information could help to overcome the unfortunate rejection of credit. In order to change the perception that credit is to be likely many disadvantageous rather than advantageous, relevant extension workers must provide appropriate information or better examples at the stage of persuasion through communication channels.

It was concluded that in terms of approached to extension worker is quite linked to main socio-economic aspects:

- ☞ Bigger farm sized,
- ☞ Wide land owning,
- ☞ Younger farmer,
- ☞ Low income,

- ☞ Small credit applied,
- ☞ Low family working hour employed.

Behaviour Farmer to Group Leader and Other Farmer

Group leader and other farmer are considered as informal communication agency. This particular agency is supposed to create an effective flow of information in the process of communication, especially at the persuasion stage. Informal communication agency helped to complement or corrects farmers' understanding and improves their knowledge. Besides, these key-persons could establish a network to enrich and support farmer's own understanding, because farmer was getting used to communicate with them.

Sakkar (1998) who indicated that a person in the way he decides whether to accept or refuse an innovation, some factors would be influenced supports this perception. The factors were habit, social prejudice, and entrepreneurial caution that may lead to a conservative attitude the part of an individual and prevent adoption of *even the most advanced techniques and equipment available*. That such factors are empirically relevant to a certain circumstance.

Figure 2. Shows behaviour farmer to both group leader and other farmer:

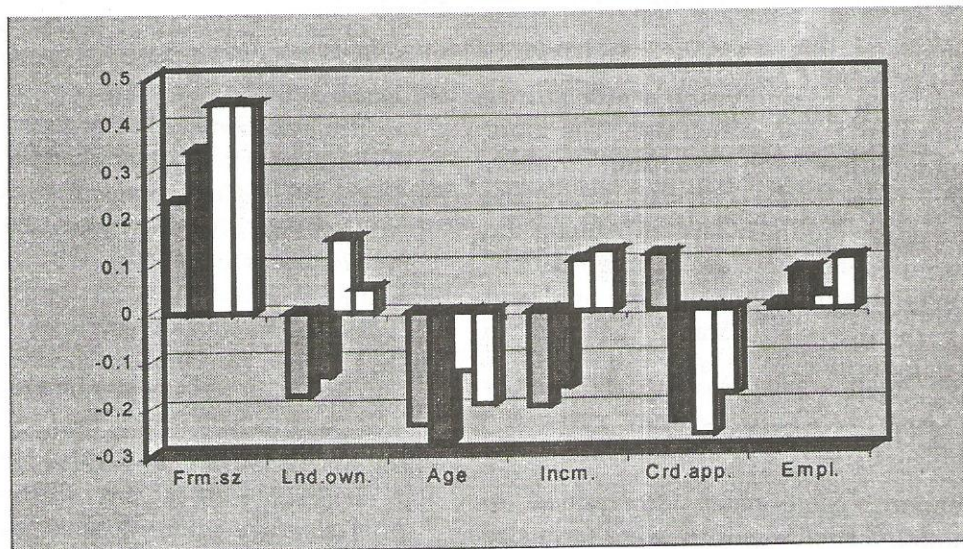


Fig.2. Correlation between socio-economic and informal communication channels

Note: 1). Variables are the same with Fig.1.
 2). Access to informal communication

Channels:

- ☞ Visited by group leader
- ☞ Visited group leader
- ☞ Visited by other farmers
- ☞ Visited other farmers

Correlation test was used to identify the statistically significant difference between active and passive approach to group leader as well as other farmer. It could be summed up as follows:

1. Farmers are not approached but approach to their group leader. Credibility of information is likely to be the main reason for such being active. Farmers group hold weekly meeting at which they exchange ideas on farming problems.
2. As to other farmers as an agent, there was not a significant difference between passive and being active. It means that farmers frequently communicate with one another.

Topics of interest exchanged through communication channel were limited to cattle feed animal health, and improving farm, included credit information. The suppliers were group leader and other farmer with high extent and extension worker with low extent.

It was concluded that in terms of approached to group leader and other farmers were quite linked to main socio-economic aspects:

- ☞ Farm sized was more than 1.21 animal unit
- ☞ Land owning was less than 3,181 square meter
- ☞ Age farmer younger than 37.33 year old.
- ☞ Total income was less than 129,000 rupiah
- ☞ Credit applied averaged 2 head cattle
- ☞ Family working hour employed was more than 4.63 hour per day

The main socio economic characteristic components that are determined significantly cattle farmer exposures were farm size and farmer age. The more frequent to communicate with extension worker, group leader and other farmer, tended to be the higher farm size and the younger farmer. Among the socio economic components there are a quite relationship, such as family working hour, income and land owning. This particular circumstance enabled to motivate farmer in inquiring credit farm.

CONCLUSIONS

Socio economic components determined to cattle farmer communication exposure were farm size and farmer age. Informal communication channels, such as group leader and other farmer were tended to be more credible compared with extension workers a formal communication channel. Cattle farmer directly communication activities can be improved through human communication media such as extension

worker, groups leader, and other farmer, and supported by some communications media, such as booklet and rural radio broadcast.

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