Study of communication in the social interaction between cooperative members and internal elements of the rubber cooperative in Riau province, Indonesia

E Rahmadani1*, R Febriamansyah2*, I W Syarfi2 and Yonariza2

1Department of Agricultural Sciences, Graduated Program, Andalas University, Padang, 25163 West Sumatra, Indonesia
2Department of Agricultural Socio Economic, Faculty of Agriculture, Andalas University, Padang, 25163 West Sumatra, Indonesia

Corresponding author: elfirahmadani@yahoo.co.id

Abstract. Theoretically, social interaction between stakeholders determines the activity of a cooperative. Although there are some interventions made by the government, the number of active cooperative in Riau is limited, including rubber farmer cooperative. This study investigated the social interaction in active and inactive rubber farmers’ cooperative in two Regencies, Kuantan Singingi and Kampar. Those regencies were selected because they were known as the largest rubber producer in Riau Province. The study samples consisted of 300 people in which 150 persons were from active cooperatives and 150 persons were from the inactive one. The respondents consisted of the members, management, supervisors, and employees. Structured and in-depth interviews were conducted to obtain data from those respondents. There were 14 indicators of communication aspects assessed on the interaction between cooperative members and the cooperative’s internal elements. The results showed that the communication level of active rubber cooperatives was higher than in inactive ones. The main communication problem in the inactive cooperatives was the social interactions between the cooperative members and the cooperative employees which were indicated through 13 indicators. As a result, communication problems affected the activities of rubber cooperatives in Riau Province.

1. Introduction
Rubber farmer cooperative is an institution which aims to support rubber cultivation, production, rejuvenation, and rubber marketing. The Indonesian Government has developed rubber farmer cooperatives since the 1980s. One of Indonesia’s cooperative development programs is the Small Rubber Development Project (SRDP) program as a collaboration between Indonesian Government and the USA for the Riau, South Sumatra, and West Kalimantan regions. In Riau Province, the developing cooperative program is a prioritized program. However, the number of active rubber farmer cooperatives decreases in the two biggest rubber producer regencies in Riau’s, namely Kuantan Singingi Regency and Kampar Regency. Based on the Department of Trade, Cooperatives, and SMEs 2018 data, there were 10 active cooperatives in 2014 but only 2 were active in 2017-2019 in Kuantan Singingi Regency. Whereas in Kampar Regency, in 2014, there were 6 active rubber cooperatives but
decrease into only 1 in 2017. Currently, the total remaining active cooperatives in those regencies were only three units.

Agussalim et al. [1] and Hogeland [2] had provided a viewpoint of cooperative development solutions through economic and management aspects. However, the viewpoint in the case site did not bring any changes to rubber farmer cooperatives' development. It is probably due to other aspects rather than economic and management. Researchers assume that cooperative is an economic organization with social and kinship characters which relevant to Hatta [3] that considered cooperative as a non-profit companies. Social organizations prioritize their member cooperatives' interests into two dimensions, namely economics and sociology.

A cooperative is a group of interconnecting/interacting people who have the same interest. Social interaction largely determines social behaviour among actors or elements within an institution [4, 5]. One of the interactions that occur between actors/elements in an institution is communication. Balliet [6] reported that communication has a positive effect in improving cooperative relations within an institution. There are no report that has discussing the influence of the elements of communication on cooperatives development [6].

Based on this background, this study investigated the social interaction among all stakeholders in the cooperative that play important roles in the activities of a cooperative. This study assessed the communication aspects of this social interaction, especially the communication between cooperative members and cooperatives' internal elements, namely the management team, the cooperative supervisors, and the cooperative employees.

2. Materials and methods
This research continued a previous research about effect of conflict on the relationship between elements for the progress of rubber cooperative, as reported by Rahmadani [7].

2.1. Research sites
This research investigated the active and inactive rubber cooperatives located in Kuantan Singingi Regency and Kampar Regency as the rubber producer centers in Riau Province. The cooperatives were selected intentionally based on data from the Kuantan Singingi District Trade and Cooperative Office and SMEs in 2020. The chosen cooperatives consisted of three groups of inactive rubber farmer cooperatives and three active ones.

2.2. Method of data collection
The data were consisted of primary and secondary data. Primary data obtained from direct interviews with informants and respondents, namely members, supervisors, management, and employees of cooperatives. The secondary data were obtained from document in the field and related institutions such as cooperative reports, plantation data, and SME and Cooperative Service Reports.

2.3. Population and sample
This study's population were all stakeholders at the active and inactive rubber cooperatives in Kuantan Singingi and Kampar Regency. The study samples were selected using a purposive sampling technique, conducted intentionally and self-determined [8] based on the report from the District Office of UKM at those two regencies. Following the previous study by Rahmadani E [7], three selected active cooperatives were (1) Koperasi Harapan Village Unit/KUD Harapan Rakyat, (2) Koperasi Maju Basamo, and (3) Koperasi Karet Plant Sumber Rezeki, while the inactive cooperatives were (1) KUD Lestari, (2) KUD Rakyat Rakyat, and (3) KUD Bukik Songang. The distribution of research respondents is presented in Table 1.
Table 1. The distribution of research respondents

| Research Respondents | Research Samples | Active Cooperative | Inactive Cooperative | Total | Sampling Technique |
|----------------------|------------------|--------------------|----------------------|-------|--------------------|
|                      | Respondents      | A      | B    | C    | D    | E    | F    |       |
| Research respondents | Members          |        |      |      |      |      |      |       |
| A                    | Total Population of respondents | 273   | 142  | 478  | 150  | 150  | 575  | 1328  |
| B                    | Total respondents | 50    | 50   | 50   | 50   | 50   | 50   | 300   |
| C                    | Cooperative organizer | 3     | 3    | 3    | 3    | 3    | 3    | 18    |
| D                    | Supervisor       | 1     | 1    | 3    | 2    | 2    | 3    | 12    |
| E                    | Employee         | 2     | 4    | 5    | 0    | 2    | 0    | 13    |

*) This study refers to Cohen et al [9]; Baley [10] and Roscue [11] to select quota samples of 50 respondents.

Note:
A: KUD Harapan Rakyat in Kuantan Singingi Regency
B: Koperasi Maju Basamo in Kuantan Singingi Regency
C: Koptan Sumber Rezeki in Kampar Regency
D: KUD Lestari Kuantan in Kuantan Singingi Regency
E: KUD Usaha Rakyat in Kuantan Singingi Regency
F: KUD Bukik Songgang in Kampar Regency

2.4. Data analysis

Data were analysed descriptively to provide a systematic, factual and accurate description of the facts, the properties, and relationships between the investigated phenomena. The techniques of data collection were observation and structured and in-depth interviews.

In order to analyse the social interaction within the active and the inactive cooperative, this study measured the communication level between the cooperative members and the internal elements of cooperatives that divided into several categories: X1: communication between cooperative members and the management team, X2: communication between cooperative members and cooperative supervisors, and X3: communication between cooperative members and cooperative employees.

The communication parameters were assessed by 14 indicators as mentioned by Effendy [12], namely, I-1) the understanding of language, I-2) activities commenting/responding between the elements at meeting, I-3) focus of the topic discussed, I-4) level of technical interruption while communicating, I-5) communication intensity between communicant and communicator in a year, I-6) duration of communication, I-7) distance between the house of communicant (members) and the communicator, I-8) the type of communication media used, the activity of receiving/giving opinions, I-9) suggestions and criticisms at each annual meeting, I-10) the activity of giving instructions/directives to members annually, I-11) the activities of providing information and the dissemination of activity reports in/outside the cooperative by one element to other elements in a year, I-12) openness of organizational rules inside/outside the cooperative, I-13) openness of organizational costs (information costs of cooperation, operations, activity agreements, participation in meetings and marketing costs of rubber), and I-14) disclosure of the cost of goods sold in cooperative.

At each indicator, the respondent gave an answer on a Likert scale from 1 to 5. The accumulation of all indicators were then classified into five categories of assessment, namely: (a) very low with a score of 0-20.00%, (b) low with a score of 20.01 - 40.00%, (c) good enough with a score of 40.01 - 60.00%, (d) good with a score of 60.01 - 80.00%, and (e) very good with a score of 80.00-100%.
3. Results and discussion

3.1. An overview of rubber plantations and rubber farmers cooperatives in riau province

Riau Province has a total area of 87,023.66 Km² in the central part of Sumatra Island, Indonesia. This province is a potential area for developing smallholder rubber plantations because it has a rubber plantation area of 349,370 ha. Since the 1980s, the government chooses this area as one of the locations for smallholder rubber rejuvenation activities. The government distributes various funding and input assistance through cooperatives to this area.

Riau Provincial Government has selected the Kuantan Singingi Regency and Kampar Regency as the community rubber development area through cooperatives. According to the Department of Trade, Cooperatives and SMEs in Kuantan Singingi, the recorded number of active rubber cooperatives was 20 units in 2007, 10 units in 2014, and 2 units in 2017-2019. On the other hand, there was 6 units in 2014 and only 1 unit in 2017-2019 in Kampar Regency. So that the remaining amount of active cooperatives in 2019 in Riau Province were three units. The active rubber farmer cooperatives, KUD Harapan Rakyat, Koperasi Maju Basamo, KUD Usaha Rakyat, and KUD Bukik Songgang were established by the indigenous rubber farmers. In comparison, the creator of inactive rubber farmer cooperatives of Koptan Sumbe Rezeki and KUD Lestari were local farmers and the transmigrants during 1980s transmigration program, whose main livelihood was as rubber farmers.

3.2. The communication between the member and the internal elements of rubber farmer cooperative in Riau Province

In general, the communication between cooperative members and the internal elements of cooperative (managers, supervisors, and employees) were relatively good. However, the communication between them in the active cooperative was much better than the communication between them in the inactive cooperative (Table 2).

| Communication | X1 (%) | Value Category | X2 (%) | Value Category | X3 (%) | Value Category |
|---------------|--------|----------------|--------|----------------|--------|----------------|
| Active Cooperative (a) | 76.36 | Good | 72.60 | Good | 73.37 | Good |
| Inactive Cooperative (b) | 48.04 | Good Enough | 47.24 | Good Enough | 23.77 | Low |

Cooperative members in the active cooperative could communicate well with the management, supervisors, and employees by a score of 72.60% -76.36%. On the other hand, the inactive cooperative had inadequate level of communication between the cooperative members and the cooperative's internal elements. The lowest level of communication in inactive cooperatives was between the members and the employee which indicate that there were some problems in their communication. It gives a probable explanation why those cooperatives were inactive currently. It is relevant to the understanding of Alan [13] that mentioning people will learn what they do in the organization by communicating with each other.

3.2.1. The communication between members and management.

In general, the communication level between cooperative members and the active cooperative's management team was much higher than in the inactive cooperative (Figure 1). The results for active cooperatives are good or very good with range from 64.13% to 89.51%. This score signifies the existence of the communication between members and management at the active cooperative. On the other hand, inactive cooperatives' value is low to good enough, with score ranging from 36.89% to 66.71%. Those results indicate that there were some communication problems in the inactive cooperatives. All the indicators have good value except for the indicators of I-9, I-10, I-11 with sequential values of 36.89%, 38.86%, and 37.16%. Members
rarely gave opinions, suggestions, and criticism to the management. Instruction was also rarely given by the management to the members; thus, the interaction between them was limited. Also, the reports/notes on cooperative activities were rarely informed and disseminated by the management to members. This result is consistent with the interview results with the members/ respondents of the inactive cooperative as described below:

"Ten years ago, we continued to hold meetings but only for formalities. We attend the meetings for 15 minutes to listen to the report and 2 minutes for questions and answers. We joined the cooperative because of government obligations. In addition, this cooperative formed by the government always received financial assistance for business capital. Since the rubber price was low (approximately Rp. 5,000 / kg), the management could not force us to attend the meeting and pay obligatory savings to the cooperative. They knew the low rubber income and members were busy looking for side jobs. As a result, the meeting is rarely held because the management does not have material to report to the cooperative. Our enthusiasm has diminished because many government programs have led to oil palm cooperatives. We replaced our rubber plantation with palm oil." (Si, 53 Years old)

Another problem arises due to the communication about the cost of goods sold or offered in cooperatives was not optimum, which evidenced by the interview results below:

"We were not know the cooperative's financial arrangements since the case occurred. Previously, we never paid a copy of the material for a meeting because the cooperative provided the funds. We were also not given information regarding money in and out of cooperatives and selling garden products consequently we no longer trusted the management" (Yi, 55 years old)

3.2.2. The communication between member and supervisor. Communication of members with supervisors in active cooperatives has a good-very good value with a score of 59.87% -85.73%. This result shows that there was no communication problem between members and supervisors in active cooperatives. Whereas in inactive cooperatives, there were some related communication problems; 1) receiving/giving opinions, suggestions, and criticisms at annual meetings, 2) giving instructions/directions to members, 3) providing information and disseminating reports/notes on activities within/outside the cooperative by an element to members in a year and 4) openness of organizational costs (cooperation information costs, operational costs, activity agreement costs, meeting participation
costs and rubber marketing costs). Those were proved by the value of very poor-poor on indicators I-9, I-10, I-11, and I-13; the scores are 39.60%, 20.00%, 33.33%, and 37.33%, respectively. Bad communication causes decreasing information and understanding of the cooperative elements, influencing cooperative development [14].

![Figure 2. The communication between member and supervisor in rubber cooperative in Riau province](image)

### 3.2.3. The communication between member and employees

The communication between members and employees is shown in Figure 3. The communication between them were very well in active cooperatives, as evidenced by good-very good value (score 60.67%-85.00%). A contrast result is found in inactive cooperatives. Of the fourteen indicators, all the values are very low (score 20.00%) except for I-9 (score 69.00%).

This result shows that the house's proximity does not affect and support communication between members and employees. The dominant factor that influences greatly was that the cooperative does not have a real employees. Cooperative management also acts as employees, which results in overlapping the main tasks and functions between the secretary, treasurer, and employees. For example, in inactive cooperatives (KUD Usaha Rakyat), an element holds three tasks, namely the chairman of the cooperative acting as treasurer, secretary, and employee. This condition is showed in the results of an interview with one of the inactive cooperative employees as represented below:

"When the cooperative was established, we did not know about our name as a chair of the marketing and rubber marketing services unit. We also did not know clearly the tasks assigned. We were only invited to the meeting through a greeting from the chairman's envoy to come to our house without an official invitation. The chairman only showed the cooperative's report at a glance, and we were not given a copy at the management meeting. The chairman has also done our task. During the meeting, only discussed invitations from the Regency and Province without discussing the cooperative's report." (Si, 62 Years Old)

The interview result explains that there was miss-communication between employees and management in the inactive rubber cooperative. Employees did not know their cooperative position as employees until they do not carry out their duties properly. Besides, the topic of the discussion at the meeting was not related to cooperative development. The meeting was only held to discuss invitations from the Regency or Province for the cooperative management training delegates.
The results of communication between members and management (X1), supervisor (X2), and employees (X3) at rubber cooperatives in Riau province show that communication greatly influences the development of cooperatives. These results were evidenced by comparing active cooperative data with good and very good values from the aspect of communication on the 14 indicators. Communication between them at active cooperatives goes well. While inactive cooperatives' value was ranging in between very bad to good enough. There was a missed-communication between members, supervisors, managers, and employees. The source of the problem was communication between members and employees (X3). Thirteen out of fourteen indicators are very bad for inactive cooperatives, indicating that cooperative development is hampered due to inactive social interaction between members and the cooperative's internal elements.

The interview results explained that there was miss-communication between employees and management in inactive rubber cooperative. Employees do not know their position in the cooperative as employees until they do not carry out their duties properly. In addition, the topic of the discussion at meeting was not related to cooperative development. The meeting was held only to discuss invitations from the Regency or Province for the cooperative management training delegates.

4. Conclusion
The communication members between the management, the supervisors, and the employees greatly influence rubber cooperatives in Riau Province. Active rubber cooperatives communicate well, indicated by good-very good values (score 72.60% - 76.36%). Poor - quite good scores (23.77% - 48.04%) from inactive cooperatives show that communication problems obstruct cooperative development. The main source of problems is communication between members and employees (X3) because of 13 out of 14 indicators have very poor values.

References
[1] Lestari A, Karim M and Yaddarabullah Y 2019 Eco. Develop. Anal. J. 8 9–21
[2] Julie H 2015 J. Co-operative. Organ. Manag. 3 60–71
[3] Hatta M 1987 Membangun koperasi dan koperasi membangun (Edisi 2) (Jakarta: Inti Idayu Press)
[4] Mubyarto 2003 Dari ilmu berkompetisi ke ilmu berkoperasi Jurnal Ekonomi Rakyat 4 (II)
[5] Lammers J C 2011 Management Communication Quarterly 25 154–82
[6] Balliet D 2010 J. Conf. Resol. XX 1–19
[7] Rahmadani E, Febriamansyah R, Syarfi I W and Yonariza 2020 Journal of Adv. Research in Dynamical & Control Systems 12 237–45
[8] Malo M and Trisnoningtias S 2001 Research Methods of Community (Jakarta: Pusat antar Universitas Ilmu-ilmu Sosial Universitas Indonesia)
[9]  Cohen L, Manion L and Morisson K 2007 Research Methods in Education (New York: Routledge)

[10] Baley A B 1978 Methods of Social Research (London: Collin Mac Millan Publisher. The Free Press)

[11] Roscoe J T 1979 Fundamental research statistics for the behavioural sciences vol 2 (New York: Holt Rinehart & Winston)

[12] Effendy O U 2011 Ilmu Komunikasi: Teori dan Prakteknya (Bandung: Remaja Rosdakarya) p 192

[13] Alan F and Gary 2003 Annual Review of Sociology 10 239–62

[14] Luangduangsitthideth O, Limnirankul B and Kramol P 2018 Kasetart. J. Soc. Sci. XXX 1–7