



## **Information Access for Community Through Electronic Media for Improving the Knowledge of Fish Cultivation in Rebaq Rinding Village, Muara Muntai Sub-District, Kutai Kartanegara, East Kalimantan**

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### **ABSTRACT**

Accessing information through electronic media is unfamiliar thing for the community since it is essential in improving their insight in order to support the increase of their fish production. This research was performed in Rebaq Rinding Village, Muara Muntai Sub-District Kutai Kartanegara District. Census method was used in this research, employing 30 fish cultivators in Rebaq Rinding Village. The objective of this research is to find out the type of information media used by fish cultivator community. This research found that the electronic information accessed by the community of fish cultivator in Rebaq Rinding Village is in the form of mobile phone and television. Among the information they access includes entertainment, watching youtube, searching for recent information and watching television. In terms of information concerning fishery, they access information of how to spawn fish correctly and how to make natural feed for the fish.

**Keywords:** Access to Information, Cultivation, Electronic Media

### **INTRODUCTION**

Rebaq Rinding Village is one of 13 villages in Muara Muntai Sub-District which is a center for fish cultivation and processing (Statistic Indonesia of Kutai Kartanegara District, 2018). The type of freshwater fish cultivated by Local people of Rebaq Rinding Village include Jelawat Fish (*Leptobarbus hoevenii*), Carp (*Cyprinus carpio*), Tilapia (*Oreochromis niloticus*), Gabus Fish (*Channa striata*) and Betutu (*Oxyeleotris marmorata*). Fish cultivation in Rebaq Rinding village is carried out by the community as the main livelihood. They sell their fish not only to local people but also people outside the island. Therefore, they need information to improve the quality of their products, especially the process of breeding fish.

Accessing information through electronic media is unfamiliar thing for the community since it is essential in improving their insight in order to support the increase of their fish production. Through electronic media, cultivators can also carry out a campaign about fish cultivation. The access of campaign increases through social media and more people can have information about fish cultivation. Thus, using social media could be key to success the business (Wan Di, et. al, 2019).



The purpose of this research is to find out the information accessed and type of media information used by electronic media in improving the knowledge of fish cultivation in Rebaq Rinding Village, Muara Muntai Sub-district, Kutai Kartanegara Regency.

## RESEARCH METHOD

This research was carried out in Rebaq Rinding Village, Muara Muntai Subdistrict, Kutai Kartanegara Regency for 11 months, starting from February to December 2019. Data collection was carried out for 3 weeks. Data and information needed in this study were obtained through survey methods, it took sample from one population and questionnaires were used as a primary data collection tool.

The sampling method used in this research was the census method. Census research is a study that takes a population group as a sample as a whole and uses a structured questionnaire as a primary data collection tool to obtain specific information (Usman and Akbar, 2008). The population in this study were all fish cultivators in Rebaq Rinding village. There are 30 fish cultivators used as respondents.

Data analysis method used in this research is descriptive analysis. The Bullet theory model, also known as the hypodermic needle theory, stimulus-response mechanistic theory which is seen as an attribute of great power in communication. This hypodermic needle model considers people to simply take the messages given by the mass media without any consideration (Rakhmat, 1998). New ideas received from the mass media have a direct effect, here the mass media has a strong and directed influence (McQuail, 2011).

## RESULTS AND DISCUSSION

### Population, Livelihood and Education Level

Rebaq Rinding Village has population of 1013 people, consisting of 262 family heads, male population is 524 people (51.72%) and female population is 489 people (48.27%). Most of people in Rebaq Rinding Village is Banjar tribe. For more details data on the distribution of population by gender can be seen in the table below:

**Table 1. Total Population by Gender**

No	Gender	The number of people	Percentage (%)
1	Male	524	51,72
2	Girl	489	48,27
<b>Total</b>		1013	100

Rebaq Rinding villagers based on their livelihood distribution in detail can be seen in the table 2.

**Table 2. Distribution of Population by Livelihood**

No	Livelihood	The number of people	Percentage (%)
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1	Civil Servants (PNS)	8	3,40
2	Private	43	18,30
3	Trader	14	5,96
4	Farmers	46	19,57
5	Artisan	11	4,68
6	Fisherman	104	44,26
7	entrepreneur	4	1,70
8	Retired	5	2,13
	<b>Total</b>	<b>235</b>	<b>100</b>

Source: Rebaq Rinding Village Profile, 2019

### General Education Level

As many as 50.24% people of Rebaq Rinding Village are elementary school graduates. The education level of Rebaq Rinding villagers is relatively low, this can be seen in the table below:

**Table 3. Population Level by Education Level**

No	Education	The number of people	Percentage (%)
1	Elementary School (SD)	106	50,24
2	Junior High School (SMP)	44	20,85
3	Senior High School (SMA)	51	24,17
4	Bachelor degree (S1)	10	4,74
	<b>Total</b>	<b>211</b>	<b>100</b>

Source: Rebaq Rinding Village Profile, 2019.

### Characteristics of Respondents

From the results of observation conducted with 30 respondents of fish cultivation in Rebaq Rinding Village obtained the following description of the respondents:

#### Age

Age is one of the factors influencing the activity of fish cultivation business. The age of the respondents ranged from 20-60 years. The age of most fishermen respondents was 31-40 (40%). This shows that the age of the respondent is in the productive age, which is 31-40 years old while the age of unproductive ranged > 60 years. However, age is not the main factor affecting fish farming activity.

#### Last Education

Good quality of human resources will be able to have a positive impact in the economic growth of a region. The quality of human resources can be measured from a person's education. Cultivators will be more successful if they have education and open-minded in all knowledge and information about fish farming. Based on data obtained from 30 respondents, the education of respondents starting from elementary school, junior high school, senior high school and bachelor degree are presented on the Table 4:

**Table 4. Characteristics of Respondents by Education**

No	Education	The number of people	Percentage (%)
1	Elementary school	2	6,66
2	Junior High School	7	23,33
3	Senior High School	20	66,66
4	Bachelor Degree	1	3,33
Total		30	100

Source: Primary data processed, 2019

Table 4 above shows that the most respondents are senior high school graduates, as many as 20 people.

Based on the data obtained, the most of fish cultivators are Banjar tribes as many as 26 people, the other is Kutai tribes as many as 4 people.

**Table 5. Identity of Respondents Based on Ethnicity**

No.	Etnic	Number of Respondents	Percentage (%)
1.	Banjar	26	86,66
2	Kutai	4	13,33
Total		30	100

Source: Primary data processed 2019

### Side Job

Based on the data obtained, it is known that all respondents have side jobs, honorary teacher, fishermen, traders and entrepreneurs. The detail is in the table below:

**Table 6. Identity of Respondents Based on Side Jobs**

No.	Side job	Number of Respondents	Percentage (%)
1.	fisher	18	60
2.	Trader	6	20
3.	Honorary	1	3,33
4.	entrepreneur	5	16,66
Total		30	100

Source: Primary data processed 2019



### Revenue / Month

Respondents' income ranged from IDR 2,000,000 – IDR 15,000,000. Respondents who have a side job have sizable income where their income is not only from fish farming, but also combined by other incomes. Respondents' income varies and shows the effect of dependents number.

**Table 7. Table About Respondents' Per-Month Income Overview**

No.	Revenue / Month	Number of Respondents	Percentage (%)
1.	IDR 2000.000- Rp. 5000.000	19	63.33
2.	IDR 6000.000- Rp. 15.000.000	11	36.66
	Total	30	100

Source: Primary data processed 2019

### The Number of Dependents

The number of dependents of a cultivator's family is a determining factor in running a cultivation business. Cultivators who have a large number of dependents will have a greater burden and so the cultivators who have a small number of dependents will have small burden. The number of dependents ranged from 0-5 people; it can be seen in Table 8 below:

**Table 8. Respondents' Identities Based on Number of Dependents**

No.	The number of dependents	Number of Respondents	Percentage (%)
1.	0-2	18	60
2.	3-5	12	40
	Total	30	100

Source: Primary data processed 2019.

### General Description of Fishery Cultivation Business in Cages

Commodities managed by people of Rebaq Rinding Village, Muara Muntai District include the cultivation tilapia, carp, betutu fish and cork fish. This cultivation business starts from hatchery to enlargement. Rebaq Rinding Village is quite well known as a center for good fish farming, so from Muara Muntai District to outside the area buyers come directly to business actors in Rebaq Rinding Village, the harvest is marketed according to market price ranged IDR 25,000- IDR 30,000 per / kg.

### An Overview of Media Access in the Rebaq Rinding Village

The development of increasingly sophisticated technology has made it easier for most human jobs, including for people who have cultivation business. Through electronic media such as smartphones, internet, and television, people can get information from all fields of science, for example how to breed fish and how to feed fish with natural food.





### Types of Electronic Media

The types of electronic media used by fish cultivators in Rebaq Rinding village are smartphone and television, this is because these two objects are very familiar in every human's life. People can use it as entertainment as well as looking for information.

The frequency of smartphone and television utilization by cultivators in Rebaq Rinding Village can be seen in table 9 below:

**Table 9. Frequency of Cellphone and Television Usage by Respondents**

NO	Types of Electronic Media	Average Duration (hour)	Percentage (%)
1	Smartphone	1, 5 jam	33.3
2	Television	3 jam	66.7
	Total	4,5	100

Source: Primary data processed 2019

The results showed that the frequency and utilization of smartphones by cultivators of Rebaq Rinding Village was quite high, 1,5 hours per day, while the use of television by the cultivators in Rebaq Rinding Village was also classified as high with a duration of 3 hours per day. Smartphone and television have a very important role for cultivators in Rebaq Rinding Village including to find out general information such as good spawning for the fish. Causing social changes both positively and negatively.

Do you have electronic media?

The results of the study found that 30 people owned electronic media, which 100% chose Yes, which means that all farmers have electronic media, whether television, cellphones, even other electronic media, and the information sought and obtained in accordance with what is needed is just an example of information obtained from electronic media such as how to spawning fish properly and how to overcome disease in fish.

**Table 10. Ownership of Electronic Media Owned by Respondents.**

Electronic Media Ownership	Respondents' answer	Number of Respondents	Percentage (%)
1. Do you have electronic media?	A. Yes	30	100
	B. No	0	0
Total			100

Source: Primary Data (Processed) 2019.

Table 10 above shows that cultivators chose Yes, as many as 30 people, which means all farmers have electronic devices.

**Table 11. The Role of Electronic Media and General Information accessed by Respondents**

The Role of Electronic Media as a Means of Communication	Respondents' answer	Number of Respondents	Percentage (%)
1. Does your electronic media provide information or general knowledge?	a. Yes	23	76.6
	b. Sometimes	3	10
	c. No	4	13.3
	Total		100
2. Is the information or knowledge you can understand?	a. Yes	21	70
	b. Sometimes	5	16.6
	c. No	4	13.3
	Total		100
3. Does the information or knowledge contained in the electronic media suit your needs?	a. Yes	19	63.3
	b. Sometimes	7	23.3
	c. No	4	13.3
	Total		100

Table 11 above shows the role of electronic media as a means of communication has a high influence, on the first question, as many as 23 respondents chose Yes, because it is true that the electronic media such as television and smartphone give them information and knowledge. They get information and knowledge from media whether it is bad and good information. On the second questions, 21 respondents chose Yes, which means that respondents could understand the information received and the information certainly provided useful knowledge. It can also be seen on the third questions, as many as 19 people chose Yes, that the information and knowledge obtained was in accordance with what was needed. The reason most choose Yes, because what is needed can be obtained immediately through electronic media.

As a Means of Entertainment and Entertainment

**Table 12. As a Means of Entertainment and Cultivator Entertainment**

As a Means of Entertainment and Entertainment	Respondents' answer	Number of Respondents	Presentase%
	a. Yes	24	80



1. Do you use electronic media to access social media to fill your free time?	b. Sometimes	6	20
	c. No	0	0
			100
2. When you feel bored do you look for entertainment using electronic media	a. Yes	24	80
	b. Sometimes	6	20
	c. No	0	0
			100
3. Do you feel that entertainment is an important means of entertainment?	a. Yes	10	33.3
	b. Sometimes	16	53.33
	c. No	4	13.3
			100

Source: Primary Data (Processed) 2019

Table 12 above shows that in first question, as many as 24 respondents chose Yes, where respondents used electronic media to access social media, both for entertainment and to relieve boredom, electronic media used in the form of mobile phones or tablets and most-used social media is google, facebook and youtube. In second question, it can be seen that 24 respondents chose Yes, where respondents sought entertainment on electronic media that they owned as a means of entertainment. In third question, it can be seen that 16 respondents choose sometimes, where respondents feel that entertainment is one of the most important entertainment facilities, entertainment that has been followed such as a night performance during a wedding celebration.

#### The Role of Electronic Media in Fisheries Information Access

**Table 13. The Role of Electronic Media in Fisheries Information Access**

The Role of Electronic Media as a Means of Fisheries Business Training	The answer Respondents	Number of Respondents	Percentage%
1. Does your electronic media provide information about education and training in the fishing business?	a. Yes	9	30
	b. Sometimes	21	70
	c. No	0	0
			100





2. Is the information and knowledge that you get can be understood?	a. Yes	11	36.6
	b. Sometimes	9	63.3
	c. No	0	0
			100
3. Does the information or knowledge contained in the electronic media suit your needs?	a. Yes	24	80
	b. Sometimes	5	16.6
	c. No	1	3.3
			100

Source: Primary Data (Processed) 2019

Table 13 above shows that in first question, as many as 21 respondents chose Sometimes, where the role of electronic media in providing information about fish cultivation and training is quite good. In second question, as many as 19 respondents chose Sometimes in which the information received was quite understandable by respondents. In third question, 24 respondents chose yes, which information or knowledge contained in the respondent's electronic media according to needs, because it is also easy to obtain.

#### The Role of Media as Access to Marketing of Fisheries Products

**Table 14. The Role of Media as Access to Marketing of Fishery Products.**

As a means of marketing fishery products	Respondents' Answers	The number of Respondents	Percentage %
1. Do you use media to promote the fishery products that you produce?	a. Yes	4	13.3
	b. Sometimes	24	80
	c. No	2	6.6
			100
2. When you buy fish or feed, do you use information from electronic media that you have?	a. Yes	30	100
	b. Sometimes	0	0
	c. No	0	0
			100
3. Do you think marketing using electronic media is very helpful?	a. Yes	13	43.3
	b. Sometimes	7	56.6



	c. No	0	0
			100

Source: Primary Data (Processed) 2019

Table 14 above shows that in first question, as many as 24 respondents chose sometimes, because respondents rarely promote their fisheries products, sometimes the products have not been promoted already bought up by retailers either coming directly to the location or ordered in advance so no time to have time promoted are out of products that want to be marketed. In second question, as many as 30 respondents chose Yes, because in order to get fish seed and feed, the cultivators communicate through mobile phones. In third question, 17 respondents chose Sometimes, which means marketing through electronic media is quite helpful. However, not all respondents use electronic media for marketing, sometimes they do a direct transaction.

## CONCLUSIONS

Information accessed by fish cultivators' community in Rebaq Rinding Village is general information such as fish cultivation, fish spawning, how to make a natural feed and entertainment. To improve the quality of fish cultivation, it is better if the community uses existing technology and accesses various information in it about fish cultivation. Electronic media such smartphone can help fish marketing process by promoting the items on social media such as Facebook and Instagram. To increase knowledge, it is necessary to provide counseling and training by the government or non-govenmental organization (NGO) so cultivators not only receive information theoretically, but also pratically.

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