### The Influence of Communication Media Usage towards Fishermen's Empowerment in Pasaran Island

# <sup>1</sup> SERLY SILVIYANTI, <sup>2</sup> AMIRUDDIN SALEH, <sup>3</sup> MUSA HUBEIS, <sup>4</sup> NINUK PURNANINGSIH

<sup>1</sup> Fakultas Pertanian, Universitas Lampung, Bandar Lampung, <sup>2,3,4</sup> Fakultas Ekologi Manusia, IPB, Jawa Barat email: <sup>1</sup> serly0607@gmail.com, <sup>2</sup>amiruddin\_ipb@yahoo.co.id, <sup>3</sup>musahubeis@yahoo.co.id, <sup>4</sup>npurnaningsih@yahoo.com

Abstract. People's empowerment could be done in several ways in all elements of society. One of the ways is by taking advantage of media for the Fishermen. Fishermen have a lot to fix in terms of their business system. On the other hand, in order to have an appropriate competence and to take advantage of business opportunities, the use of media to get the information and to gain new knowledge is highly needed. This research is conducted in Pasaran Island since it is the center of fish processing in Kota Bandar Lampung. The sample of this research is the whole group members of fishermen as many as 125 people. The research data collected consist of primary and secondary data, and then these data are tested with rank Spearman and path analysis correlation statistics. The result of this research shows that based on the rank Spearman correlation analysis, the factors related to the use of communication media result age and education level have high correlations with the use of media. The number of family dependents, the length of work as a fisherman and also the income do not have high correlations with the use of communication media. From the path analysis, it is revealed that fishermen's characteristics have direct influences on fishermen's empowerment but they also have indirect influences as well by the use of media means. Those refer to age and education level.

Keywords: communication, media, empowerment

#### Introduction

The fisheries sector is one activity that contributes to the prosperity of a nation. As one of the natural resources that are renewable, resource management requires a comprehensive approach and careful (Fauzi, 2005: 35). natural resources of the sea is very diverse and spread over most of the ocean archipelago and each of the regions with a wide range of potential, which consists of various types of marine products, and if managed and utilized optimally by considering aspects of sustainability it will be able to improve the welfare of the community, especially the coastal communities or fishermen.

Lampung Province is a province that has the potential of fishery resources large enough as manufactures processed fish, both high economic value or is just a random fish. Fishing and salted fish processing business located in Bandar Lampung Market Island, where most people work as salted fish processors.

Every fisherman wants to improve the *their welfare* through his efforts, and to open the entire insight knowledge, the necessary means of communication to bridge the fishing effort in order to help open up ways of thinking, ways of working, and trying to keep going the way business development. Media communication becomes important in the dissemination of information development, its impact is necessary to practice the use of communication technology to support the dissemination of information development. Attempts to seek and disseminate information and the ability to act in the management of the fishery will be related to the characteristics of

Received: June 28, 2015, Revision: December 28, 2015, Accepted: June 20, 2016
Print ISSN: 0215-8175; Online ISSN: 2303-2499. Copyright@2016. Published by Pusat Penerbitan Universitas (P2U) LPPM Unisba Accredited by Kemenristekdikti, No.040/P/2014, valid 18-02-2014 until 18-02-2019

fishing. Availability of information originating from the communications media will enrich the knowledge of fishing knowledge, reinforce the attitudes and behavior and is likely to change in a person in business management.

Potential in the Pasaran island quite a lot and need to be developed, and can not be separated from the important role of media use of communication that have been reached in the Island , but human resources (HR) has not been able to take advantage of existing media. The reason is the lack of access and knowledge to use, making it difficult for people to get the information needed. Pay attention to the symptoms above, this study aims to (1) studying the relationship characteristics of fishing with the use of communications media; and (2) analyze the factors that influence the empowerment of fishermen on the island of Bandar Lampung City.

This study was designed using a quantitative approach collected through questionnaires that had been prepared. This type of research is an explanatory research, which aims to explain, to test the hypothesis of the study variables. The focus of this research is the analysis of the relationships between variables (Singarimbun & Effendi, 2013: 124)

This study was done purposively Island which is located at Kota Karang in Teluk Betung Barat, Bandar Lampung. The data collection was conducted over six months, ie from February to August 2014. Data collection was conducted a census of the whole group joined in the group for maritime and fisheries

(KUKP) amounted to 125 people. The data collected in this study consisted of primary and secondary data. Primary data is collected and built the construction include fishing characteristics as independent variables that allegedly affect the use of communication media and empowerment of fishermen, as shown in Figure 1.

### Factors that affect the empowerment of fishermen

Characteristics of the fisherman who analyzed in this study included age, formal education, number of family burden, the experience of working as a fisherman and a fish processors, as well as the level of household income fisherman (HIF). The results showed as many as 37.6 percent of respondents were in the age group 36-45 years of age and the average age of 40 years. This shows that the age group of respondents are in the economically productive age, where the respondent has enough potential to carry out its business activities. When referring to the opinion of Rush (1995: 54) states that the productive age range 15-65 years, activity and productivity of a person is affected by age. According Mantra (2004: 87), economically productive age group are in the productive age group 15-64 tahun. Umur closely related to the ability to make decisions and take risks in increasing revenue.

Based on the level of formal education have been followed by respondents classified as having low formal education, the education level of 0-6 years, or the equivalent of sixth

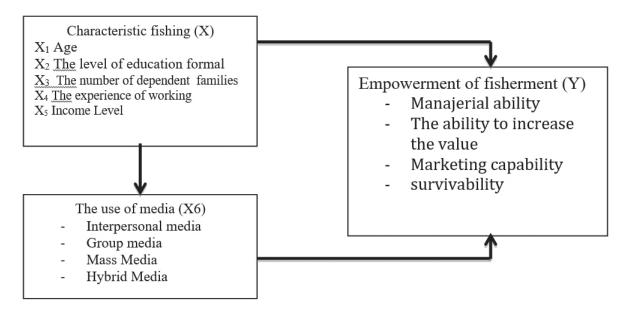


Figure 1. Frame of research

grade elementary school (SD). Low education levels can reduce the response to the learning process to make changes in information searching and processing of fishery resources. Respondents who have a low education learn a lot of sesame processors or a fisherman who has education, on the island has one elementary school, while continuing to study level of secondary school (SMP) and senior high school (SHS) will have to cover the far enough, because it is in other districts.

Number of family burden reflect the availability of labor can be empowered. Economically, the large number of family burden is an asset, when all family members are involved in a production process. In addition, the number of family dependents associated with the decisions made respondents in conducting their business. The results showed 72 percent of a small family with only have 1-3 family members, the average number of dependent people in the family is three people. Number of family members covered by most of the respondents are not too many, because of the large number of family members covered will affect the amount of household spending, thus demanding the head of the family to work harder to do the job diversification strategy.

Further characteristics is an experience in working. Pasaran Island communities earn their living as fishermen and processors salted anchovy. In general, respondents' experience as fishermen were moderate (4-10 years). However, by working as a fisherman for about 10 years has made fishermen have the ability to fish, finding and catching fish, and responsive to changes in the weather and technology in catching fish, while the respondents' experience as a processor, salted in the old category (11-45 years), because this work is the main occupation and has already become a hereditary occupation on the island Pasaran. Responden who has long experience as a processor, has a network of communications with suppliers or buyers of their products, even buyers are in the area of Java.

Revenue is the amount received for his work during a given period, whether daily, weekly, monthly or yearly (Sukirno, 2006). Revenue respondents Island Market is the amount of income / income received by the husband, wife and children (if any) which derive from the basic income or revenue side, usually measured in rupiah amount received during the year. Based on the results showed

that 36.8 percent of respondents had a relatively moderate income RTN which ranges from Rp 19 million - Rp 55.8 million per year. Revenues in the Island Market influenced by the results of anchovy production per day, while the amount of anchovy production influenced the amount of fish that is obtained from the sea, which is sometimes to get the fish obtained erratic, depending on the weather / wind. Respondents also revealed that within a year there were three consecutive months can not go to sea, because of the weather factor that makes it difficult to get the fish, therefore processors seeking incomegenerating activities.

Communications media available in the study area consists of interpersonal media, media groups, the media and media hybrid, which can be used by the fishing community to obtain information in accordance with the needs of the community. The use of interpersonal media becomes a medium of communication that is always used by responden. Hal is evident from the frequency of the use of interpersonal communications media that include communication with fellow fishermen, the group's chairman, chairman of the cooperative and extension at tinggi.Ini category means that fishermen feel already familiar with each other and can cooperation, so that the information regarding the processing of fisheries can be more easily accepted. As the results of research Indraningsih (2011: 19) that the media as a transmitter interpersonal communicative technologies to farmers.

All the respondents use the media interpersonal form of contact with a fellow fisherman, this is because most of the fishermen who have experienced about the fish processing business sharing his experience to fellow fishermen or processors that are usually carried out in various meetings on fishing groups in the form of exchange of information about their business development, as well as in non-formal between fishermen or processors with each other fishermen when meeting location work. Interpersonal relationships is this which is the connecting link between the various acquisition information given or received, so that there is a reciprocal relationship between the giver or the source of the message with the recipient of the message, it means that the fishermen who have experienced bias to function as a communicator and other fishermen as a communicant. Besides, there are fishermen who make a visit outside the

region to obtain information which is then transmitted to a fellow fisherman.

According to Rogers (1988: 77), familiarity in communication among peers in the business due to the nature of homophili, which in interaction have in common in some ways like the values, beliefs, education, social status and other interests. Effective interpersonal communication respondents do every day, this is in accordance with the opinion of Effendy (2007), that the interpersonal communication or interpersonal communication is the communication between a communicator with a communicant. This type of communication is considered the most effective in changing attitudes, opinions, or human behavior since a dialogical process, compared to the group communication. In line with the research (Mulyandari et al., 2005: 6) that interpersonal media is the most dominant media used by farmers in access innovation needed.

The intensity of group communication media by the fishermen do every month. This condition, because the fishermen rarely had time to get together as a group, but the quality of the meeting is used as effectively as possible. Social capital is the trust and local cultures that are beneficial to survival in the interaction and interdependence of the fishing group. If the compact between fishermen do not, do not trust each other, then the group will not develop. This is consistent with the expectations of respondents, that the existence of a group of media can be used as a forum to foster social capital, so that the group as a medium of communication that can create high social capital. Moreover fisherman on the island of Vortex has been used to living in an atmosphere of mutual help and mutual responsibility for the neighborhood. On the other side also has established a pretty good interaction, namely the harmonious relationship between the fishermen on the island Market. Media group is expected to foster community participation in the development of coastal areas and not only identify the problems in the fishing, in addition to participation, is their common language, so as to strengthen existing social capital. According Dikurahman (2013: 37) through a common language that allows each member of the group to interact and communicate. As well as race and religion. The similarity in the tribe and religion can minimize conflicts within the group of fishermen that may result due to differences in cultural roots and outlook on life.

The use of the mass media that consists of the print media and broadcast media (television and radio) are in the medium category. This is caused by: (1) lack of print media that can be accessed respondent, (2) the fishermen are less interested in print media because it is difficult to understand, (3) the limited information on fisheries delivered through broadcast media, and (4) the broadcast media more many respondents used as a medium of entertainment. Susanto in Zulkarnain (2011: 67) describes an approach that can be done in the open access to information in order to speed up the dissemination is the empowerment of mass communication through mass media, such as television and radio.

The use of hybrid media, generally in the low category. This condition is caused due to more use of fishing activities in the sea. On the other hand, the condition of the close relationship between fishermen, fishermen rarely use hybrid media as a communication medium, although low in using hybrid media do not make the fishermen did not get the latest information. This is because the fishermen have to have a sense of immediacy, it proved the existence of such high. Although interpersonal communications media use hybrid benefit the fishermen, so that even though the fishermen were doing a cruise is no sense of closeness between fishermen and other fishermen remain and awake.

## Analysis of Factors Associated with Use of Media Communication

Spearman rank correlation analysis results showed factors associated with the use of communication media by fishermen on the island of Bandar Lampung City Market showed that age and level of education have a very real relationship with the use of media. Dependents, long work as fishermen and fish managers and income not related to the real ( $\rho$ > 0.05) with the ability of the fishermen in the use of communication media. Relations between the study variables illustrated in Table 1.

Table 1 shows that the age-related highly significant ( $\rho$  <0.01) negative with the use of mass media and hybrid media. This means that the older the fishermen, so diminishing the behavior of fishermen in the use of radio, television and newspapers are available as resources fishery processing. Fishermen with older age tend to be more conventional in finding information fishery

Table 1
The coefficient of correlation between individual characteristics with the use of communication media

The characteristic of the individual	Indicators of the use of communication media $(r_s)$				Total
	Interpersonal Media	Group Media	Mass Media	Hybrid Media	
Age	-0,164	-0,110	-0,310**	-0,327**	-0,241**
The level of education formal	-0,004	0,061	0,069	0,039	-0,454**
The number of dependent families	-0,011	0,088	-0,054	-0,077	-0,051
The experience of working	-0,159	-0,069	-0,165	-0,215*	-0,120
Income Level	-0,153	-0,180*	-0,214*	-0,309**	-0,028

Description:\*\*very real exten on  $\rho$ <0,01

 $r_s$ : coefficient of rank Spearman

Unlike the young age more proficient use of information technology and also has a high curiosity. Likewise with the use of hybrid media, which means the older the fishermen, the use of mobile phones and internet behavior will be lower, or the older the person, his ability to adapt to new technologies is becoming increasingly difficult. From the observation that the respondents had only an old age using a mobile phone for everyday purposes in the form of telephone calls and send messages. The majority of respondents already have a smart phone, but it is not being used to help respondents get information processing activities fishing, only a few respondents who already use the facilities whattsup and blackberry massanger (BBM).

The research results Suryantini (2003) which states that the age-related experience and knowledge of a person about something and is in line with the maturity of the physical and emotional maturity. In addition, age is also associated with learning capacity and productivity. The younger a person is, in general, learning capacity and high labor productivity, as well as a spirit of great curiosity for new things. From the observation, that the respondent has old age, do not want to search for information or knowledge through the use of communications media available results are consistent with research Mulyandari et al (2005: 8) that the age of the farmers have a negative relationship with all aspects of behavior in use of information technology. The older age of farmers, tend to lower the level of knowledge, attitudes, and skills in using information technology.

If the standards of the opinion according to Rusli (1995: 54) in the productive age, which states that at the age of 15-65 years generally have high levels of willingness, passion and the ability to strive farmer tends to be higher. The analysis showed that the average age of the respondents belong to the productive age, so the ability of respondents in using media is highly dependent on the level of interest keaktivan and respondents to the communications media. In general, fishermen in adulthood or old does not have the will, spirit and a great ability in using the mass media (television, radio and newspapers) and hybrid media (mobile and internet) to search for the information processing development of fisheries. This condition causes the relation of age to use the mass media and media hybrid negatively correlated. From the research that respondents aged parents using mass media such as television and radio only for entertainment only.

Results of hypothesis testing also showed no real connection ( $\rho$ >0.05) between the formal education level of respondents with the use of communication media in the Pasaran Island Bandar Lampung, this is because all the communications media can be accessed by fishing without a formal high school, especially respondents have low education and the use of communication media in the search for innovation is still low category, except the interpersonal communication media. This condition is contrary to the opinion of Mosher (1985), that education is one important factor to influence the acceptance of new things. Based on analysis of these data, it appears

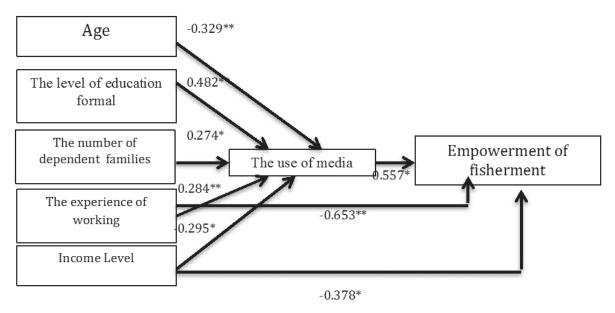
<sup>\*</sup>real exten on  $\rho$ <0,05

on the Pasaran Island fishermen in the use of the mass media is not determined by the height or lack of education. To increase the scale of the business to be supported by large capital, because capital is the main support in improving the business scale, so the formal education a person is not a major determining factor in improving the business, but formal education a person preferred to support a person's skills in the management of the business. The level of formal education someone would influence someone in the conduct of its business, if the level of the higher one's education, the higher the power elicits creation to its business, even faster in adopting new technologies, including the use of various media to obtain information related to business development. The research result shows that most respondents have low education, they do not have the will to take advantage of the communication media for information processing fishery, because they do not have the skills to use it. For example, have the availability of a computer with the Internet network at the cooperative office Pasaran Island, but they no willingness to learn to operate a computer.

Spearman rank correlation analysis results showed the number of dependents respondents relationship fisherman on the Pasaran Island with the use of media has a correlation coefficient rs = 0.044 showing the relationship isn't correlate ( $\rho$ > 0.05). This situation shows a lot or a little amount of family burden will not affect fishermen in the use of

communication media. Results of statistical analysis of the relationship experiences of fishermen negatively related to the use of hybrid's media with a correlation coefficient of -0.215, which the respondents' experience of fishermen have a real connection to the hybrid media. That is, the longer a person into fishing, then the level of use of hybrid media in accessing information about their business akansemakin low. It is possible, because the experience of the respondents obtained by generations of parents (tradition), making it difficult to change the behavior of fishermen to access and obtain information online. This finding is consistent with Listiana (2013: 8) states that a person's experiences in period lwas ong enough to make a person learns from the experience to understand the condition of their business, and in that time someone has found a variety of problems, as well as how to deal with problems concerning business practiced, so little more can be referenced and strategic, to take decisions and the best course of action in controlling the problem- of business is practiced so that the innovation that comes will not be difficult to be accepted. Respondents who have more experience to get information through the respondents who have experience of working in long time, sometimes the problems of the respondents could be resolved through group meetings, so that the problem will get a solution.

Spearman rank correlation analysis results showed that there was a real connection ( $\rho$  <0.05) between the negative income levels



Picture 2
Diagrams between variables that affected the fisherment empowerment

of fishermen with the use of media groups and the use of mass media, as well as the highly significant ( $\rho$  <0.01) negative with the use of hybrid media. This means that the higher the income of fishermen, the lower the use of media groups, the mass media and media hybrid, in other words, the fishermen do not require a lot of information in the processing of fisheries through the mass media and media hybrid.

The use path analysis to analyze the direct and indirect effects of variables in the relationship between the characteristics and use of communication media to the empowerment of the fishermen. The following diagram is presented in Figure 2 the initial path that includes six variables that affect empowerment (characteristic fisherman X5 and X1-media use of communication/X6).

Analysis path with six variables that affect the characteristics of fishermen with fishing empowerment, obtained correlation values which are highly significant for both variables. The model in Figure 2 shows that the variables age, education, work experience, number of dependents, as well as the income level RTN has a direct influence on the use of communications media, and the use of communication media has a direct influence on the empowerment of the fishermen. The number of dependents and income level RTN addition to directly affect the use of communication media, both these variables also has significant direct influence on the empowerment of fishermen. In contrast to the two variables, the variables age, education level, and the number of dependents there is no significant impact on the empowerment of fishermen, it is in line with the results of research Sjafari (2010: 15) which shows that the empowerment of poor families affected by the characteristics of the group and intensity of extension.

Based on the discussion of this model, described the empowerment of fishermen have the coefficient of determination (R2) of 0.727, meaning the five independent variables can explain the diversity of variables empowerment of fishermen by 72.7 percent. It shows that the model is completely made with traffic leaving the remainder coefficient of 0.273, which means there are still other variables that affect the empowerment of fishermen. Based on the discussion of the model explained that there is a real effect for variable use of media (X6) with the empowerment of fishermen and has

a value of keofisien determination (R2) of 0.161, meaning the independent variables can only explain the diversity of variables empowerment of fisher 16.1 percent. This suggests that the model created incomplete because it leaves the rest of the traffic coefficient of 0.839, which means there are many other variables that affect the empowerment of fishermen.

Variable use of communication media have a positive influence on the empowerment of fishermen. It means that the higher use of the communications media affect the increase empowerment of fishermen. To increase the empowerment of fishermen on the island requires training and institutional development that already exist. Zamzami (2011), the empowerment of fishermen do business development activities economically productive, including fish farming, fishing, fish processing, fish marketing, and business support services such as workshops or providing other means of production and do more training charged nontechnical such as increased motivation, teamwork, and how to formulate and deliver revenue problems in writing or not tertulis. Responden can not utilize the existing communication media, due to the lack of training of the local regional office to assist respondents have skills.

Other factors that affect the empowerment of fishermen is the capital support from other parties, especially from the government side. The groups that make these factors can influence the development of the group are the groups who are always looking to expand. Of course, this situation needs to be a concern of the government, their final destination are empowering communities to improve the welfare of fishermen as well as make it as independent groups, including in terms of capital. Pasaran Island has a cooperative institution that can be a bridge between the local agencies and groups of fishermen, especially in the provision of capital or financial aid for inventory cooperative. Cooperative itself has a shop that sells fishing equipment and fishing purposes, so that the respondents did not trouble to acquire tools for work purposes respondent.

### Conclusions

Characteristics of the fisherman include variables of age, and level of education have a real connection with the use of communication media, while work experience, number of

dependents and income levels RTN has no real connection with the use of communication media. The variables age, education, work experience, number of dependents and income levels RTN directly influence the use of communication media. Characteristics of the fisherman and the use of communication media in Island has direct influence with the empowerment of fishermen, but have a low value determination, so it still needed another variable to increase the empowerment of fishermen

Based on the analysis and assessment of the study sites, the researchers recommend for: Local authorities should make the program work to increase the interest of youth on the Pasaran island towards fishermen's work; The local government must pay attention to the existence of educational facilities at Island, so as to encourage people's ability to use hybrid media communication especially towards the empowerment of fishermen and the on the Pasaran island requires training on fishery processing of the relevant agencies to improve skills.

#### References

- Dikurahman. (2013). Faktor-faktor yang memengaruhi pengembangan kelompok nelayan dalam upaya pemberdayaan masyarakat nelayan. Jurnal Perencanaan Wilayah dan Kota. Vol 2. No 1: 35-44. http://sappk.itb.ac.id/jpwk2/?p=346 [Diunduh 5 Juni 2015]
- Effendy OU. (2007). *Ilmu Komunikasi: Teori dan Praktek*. Bandung (ID): Remaja Rosdakarya.
- Fauzi, A. (2005). Pemodelan Sumber Daya Perikanan dan Kelautan Untuk. Analisis Kebijakan. Jakarta: Gramedia Pustaka Utama.
- Indraningsih KS. (2011). Pengaruh penyuluhan terhadap keputusan petani dalam adopsi inovasi teknologi usahatani terpadu. *Jurnal Agro Ekonomi*. Vol 29. No 1: 1-24. http://pse.litbang.pertanian.go.id/ind/pdffiles/JAE%2029-1a.pdf [Diunduh 5 Juni 2015]
- Listiana I. (2013). Motivasi petani dalam menggunakan benih padi hibrida di

- Kecamatan Natar Kabupaten Lampung Selatan. *Jurnal Agricia Ektensia*. Vol 07. No 01: 1-11. http://www.stppmedan.ac.id/pdf/Jurnal%20Vol%207/6%20-%20Indah%20 Listiana.pdf [Diunduh 5 Juni 2015].
- Mantra IB. (2004). *Demografi Umum*. Yogyakarta (ID): Pustaka Pelajar.
- Mulyandari RSH, Rudi SR, Eko A. (2005). Alternatif model, diseminasi informasi teknologi pertanian mendukung pengembangan pertanian lahan marginal. [prosiding] Seminar Nasional: "Pemasyarakatan Inovasi Teknologi dalam Upaya Mempercepat Revitalisasi Pertanian dan Pedesaan di Lahan Marginal. Kerjasama Pusat Analisis Sosial Ekonomi dan Kebijakan Pertanian dengan Universitas Mataram. Bogor.
- Mosher AT. (1985). *Menggerakkan dan Membangun Pertanian*. Jakarta (ID): Yasaguna.
- Rogers EM. (1988). Media Massa dan komunikasi antar pribadi. *Dalam, Peranan Komunikasi Massa dalam Pembangunan*. E. Depari dan C. MacAndrews (Ed.). Yogyakarta (ID): Gadjah Mada University Press.
- Rusli S. (1995). *Pengantar Kependudukan*. Jakarta (ID): Universitas Indonesia Press.
- Singarimbun M, Effendi. (2013). *Metode Penelitian Survai*. Jakarta (ID): Pustaka LP3FS.
- Sjafari A. (2010). Pemberdayaan keluarga miskin melalui pendekatan kelompok. *Jurnal Administrasi*. No 1(2): 1-20.
- Sukirno S. (2006). *Ekonomi Pembangunan* (*Proses, Masalah dan Dasar Kebijaksanaan*). Jakarta (ID): Fakultas Ekonomi UI.
- Zamzami, L. (2011). Pemberdayaan Ekonomi Pesisir pada Masyarakat Nelayan Buruh di Sumatera. MIMBAR. Vol. XXVII. No. 1: 113-125. http://ejournal.unisba.ac.id/index.php/ mimbar/article/view/318#.V0WoYiN97EZ [Diunduh 5 Juni 2015].
- Zulkarnain. (2011). Model Komunikasi Pembangunan Perikanan Dalam Pemberdayaan Komunitas Nelayan Suku Duano di Propinsi Riau. Berkala Perikanan Terubuk. Vol 39. No 1: 65-78. Http://ejournal.unri.ac.id/index.php/JT/article/download/269/263 [Diunduh 5 Juni 2015].