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# INFLUENCE OF ATTITUDE AND MOTIVATION OF BEHAVIOR IN THE COMMUNITY ENVIRONMENTAL RIPARIAN MAROS DISTRICT OF SOUTH SULAWESI PROVINCE

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This study aims to find the dominant variables which have a significant influence on people's behavior in riparian areas of Maros River. Sampling individuals were randomized to get 200 respondents by using stratifide proportional random sampling technique. Data analysis are categorized in quantitative research. Based on the data, information and facts obtained, then the data is analyzed using multiple linear regression which is expected to understand the effect of one variable to variable lainnya. Variable on this research that the public attitude variables  $(X_1)$ , motivation of people  $(X_{2})$  and behavior (Y). From the analysis results obtained by the model equations with variable coefficients constants and coefficients produces the equation Y = 13.409+0.514 X<sub>1</sub> +0.081 X<sub>2</sub>. The value of the variable attitudes toward positive behavioral variables for 0.513 and the Sig. obtained 0.000 < 0.05 then H<sub>0</sub> received. Based on these results, which means the community has positive and significant effect on people's behavior that can be interpreted the attitude of society the higher rather than environmental motivation or otherwise. The value of behavioral motivation variable to variable positive for 0.120 and the Sig. obtained for 0.048 <0.05 then H<sub>a</sub> received. Based on these results, also stated that the motivation of the community has positive and significant impact on people's behavior that can be interpreted. The conclusion from the above description means that the tendency of dominant attitude variables affect behavioral variables than the variables of motivation.

Keywords: Behavior-minded environment, Border River.

# Introduction

The constitution of the Republic of Indonesia in 1945 instructs that a good environment and healthy life is a basic right of every citizen of Indonesia. In this case, the environmental management not only regulates its environment, but also community role in managing their environmental. Moreover, the regulation also stated community organization in organizing and controlling a variety of human activities that take place and the impact within the limits of the capabilities and limitations of the environment to support it. According to, Law No. 32 of 2009 on the Protection and Management of the Environment have instruct for all regions and local government are required to make the Strategic Environmental Assessment (SEA) to determine the capacity and the carrying capacity of the environment to evelopment. In this case, the human need to routinely manage the environment in order to be able to use it optimally for the benefit of sustainable development can be implemented.

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Environmental degradation, relying on the human aspect itself. The poor groups who inhabit a variety of places in urban areas still lack knowledge about the environment, a fact in daily life shows that they can not treat the environment well. Damaged environment is the result of human behavior that are less sensible to the environment. According to Daly (2001) that humans treat the earth "as if it were a business in liquidation," where the future is not appreciated. Excessive population growth will consume in excess and do excessive pollution. Correspondingly, Soerjani (2009) found an artificial environment as part of the human environment is a natural environment that has changed dramatically due to the high intervention of human civilization and the natural environment changes into an artificial environment is largely determined by the socio-cultural environment. Various examples of the damage caused by the artificial environment in urban slums is rampant along the river banks where its presence is often disrupt the river ecosystem.

Almost all the cities on the coast Indonesia crossed by streams who has very important role for the community livelyhoods. The river is a natural resource that provides a wide range of interests in the fulfillment of human needs. The river border area is part of the watershed has a potential conflict quite large considering the various interests of the stakeholder therein. Sinukaban (2000) suggested that the conflict between sectors / activities is one of the issues which should receive attention in the management of a watershed. By nature human beings have a tendency to exploit the potential of the river to its interests as mentioned by Lang (1987) "is the guiding motivation force behind the community behavior. Behavior is directed to the satisfaction of community needs". This may explain the emergence of the use of the river that is based on the requirements that must be met the community needs are physiological needs Maslow (2008), encourages people to have a place to stay that further raises the settlements around the riverbanks.

River flow or water container is natural and / or artificial form of water drainage network together with water in it, from upstream to the estuary, with restricted right and left by a demarcation line (Government Act. No. 38 of 2011). Maryono (2008) state the river is the flow of surface water that flows into the sea, which is physically divided into three sections, namely; the upstream, middle and downstream / estuary. The river is a source of water and sediment in its development has been the formation of a city since the days of the ancestors. As a consequence, in the lower reaches of the river system is a place where environmental issues are very dominant. Growth in the region around the river, especially in urban areas, has caused problems in the surrounding environment (Jiazhu, 2000). These issues, among others, in the form of inundation due to floods, riverbank erosion, degradation of the river, sedimentation disrupt river system performance building infrastructure (dams and buildings tapping/weir), until the sedimentation in the estuary of the river.

Government efforts and Maros regency government in the management of riparian areas as local protected area seems only to the extent of planning alone while the realization in the field is still far from the expected. Various phenomena observed in Maros river banks are growing development of housing and residential areas in the border river Maros City.

The problems associated with the growth of housing and residential areas in the border area of the river Maros include the proliferation of dense settlements and slums, abrasion and sedimentation as well as many domestic waste dumped of community into water bodies that have an impact on the degradation of the function and role of the river system. In this case, degradation of riparian areas is alleged that the people who live streams disempadan not have good behavior in the preservation of the river banks in the city of Maros.

The phenomenon is still an issue that has not been touched by the government and the Local Government of Maros regency in order to increase public awareness in the correct behavior in the use, and preservation of the environment in the border area of the river Maros. On the one hand, the Law of the Republic of Indonesia No. 1 of 2011 on Housing and Settlement Region instructs that one of the objectives of housing and residential areas is to improve the effectiveness and efficiency of natural resources for housing development with regard to the preservation of the environment, both in urban and rural areas. A comfortable living space implies the existence of ample opportunity for people to articulate social and cultural values and functions as a human being.

Based on the foregoing, it is important to do research on the environmental behavior of people in border river Maros City. Focus of this research are to analyze the effect and develop a model of community behavior and the use of sustainable Maros river border. The importance of this research, all functioning riparian river area protection in urban areas has been used as a settlement area. The existence of settlements in the border area of the river Maros City showed relatively low quality both from a physical building and sanitary conditions (relative slums) that will decrease the ecological function of riparian areas Maros City.

# **Research Method**

The research was conducted in April - May 2015 by the population is all the people who lived in riparian areas Maros City with total sample of 200 respondents. The sampling is by using proporsional stratifide random sampling. This type of research collected classified as research surveys and expo facto research. Mantra (2000), promoted to that type of survey research so extensive use, as the unit of analysis is the individual and carried out in a planned and systematic, with each other to be mutually supportive. Research survey said as research that takes a sample of a population and the use of a questionnaire as a data collection tool staple (Singarimbun, 2006). In addition Babbie (in Creswell, 2010) survey research

purposes to generalize the population of some samples that can be made conclusions/ allegations while on the characteristics, behaviors, or attitudes of the population.

This type of research classified according to destination in applied research, ie research directed to obtain information that can be used to solve problems of practical life (Suriasumantri, 2011). While the types and categorized data analysis in quantitative research (Sugiyono, 2012). This study aims to find the dominant variables that influence on people's behavior in the area of environmentally sound district border river Maros. Based on the data, information and facts obtained, then the data is analyzed using multiple linear regression analysis to determine the condition of each of the variables studied, which is expected to know the influence of one variable to another variable. The variables in this study consisted of the independent variables are variables public attitudes ( $X_1$ ), variable community motivation ( $X_2$ ) and the dependent variable is the behavior of the public (Y).

# **Research Results**

## **Descriptive** Analysis

Government Regulation No. 28 in 2008 on the National Spatial Plan as a follow up of the Law No. 26 in 2007 on Spatial Planning, Urban Area Mamminasata has set as one of national strategic importance once the National Events Centre in Indonesia, which has reinforced by the enactment of Presidential Decree No. 55 in 2011 on Mamminasata Metropolitan Region. The policy implications of the rapid rate of growth and development of settlements in urban areas Mamminasata Metropolitan Urban Area which includes the city of Makassar as a core, and the Maros Regency, Sungguminasa Regency, Takalar Regency as a hinterland or buffer area. Correspondingly, Maros regency government has set a spatial arrangement control instruments through the Regional Regulation (Perda) No. 4 of 2012 on Spatial Plan District Maros reinforced through Priority Settlement Area Development Plan Maros City, Building Management Plan and Environment Maros Urban Area and the level of Local Transport Maros Maros River is planned role as one of the alternative modes of transportation in Maros regency.

To illustrate the general condition based on the data and information obtained in accordance with pre-defined categories, namely variables public attitudes, motivation and behavior of society.

	Frequency	Per cent	Cumulative Percent
Strongly Disagree	10.00	5.00	5.00
Disagree	32.00	16.00	21.00
Hesitation	76.00	38.00	59.00
Agree	54.00	27.00	86.00
Strongly Agree	28.00	14.00	100.00
	200.00	100.00	

TABLE 1: DISTRIBUTION OF RESPONDENTS BY VARIABLE PUBLIC ATTITUDES

Table 1 above shows the distribution of research data based on the variable attitude of society which is divided into five levels categories in describing the condition of society.

Categories respondents with strongly disagree attitude obtained for 5.00% or 10 of the 200 total respondents, attitudes do not agree obtained at 16.00% or 32 of the 200 total respondents, hesitant attitude obtained by 38.00% or 76 of the 200 total respondents, attitudes agree obtained amounted to 27.00% or 54 of the 200 total respondents and the latter strongly agree attitude obtained 14.00% or 28 of the 200 total respondents.

From these results it can be concluded that the tendency of respondents to the research community attitude variable is doubtful about the degradation issues in Maros river with a percentage of 38.00%.

 TABLE 2: DISTRIBUTION OF RESPONDENTS BY VARIABLE DATA

 MOTIVATION SOCIETY

	Frequency	Per cent	Cumulative Per cent
Very Low	12.00	6.00	6.00
Low	23.00	11.50	17.50
Moderate	56.00	28.00	45.50
High	75.00	37.50	83.00
Very High	34.00	17.00	100.00
	200.00	100.00	

Table 2 above shows the distribution of research data by the public motivation variable which is divided into five levels categories in describing the condition of society.

Categories of respondents with very low motivation obtained for 6.00% or 12 of the 200 total respondents, low motivation obtained by 11.50% or 23 of the 200 total respondents, moderate motivation was obtained by 28.00% or 56 of the 200 total respondents, high motivation obtained by 37.50% or 56 of 200 total respondents and the latter a very high motivation obtained 17.00% or 34 of the 200 total respondents.

From these results it can be concluded that the tendency of respondents to the research community motivation variable is high with the percentage of 37.50%.

 TABLE 3: DISTRIBUTION OF RESPONDENTS BASED VARIABLE DATA

 BEHAVIOR SOCIETY

	Frequency	Per cent	Cumulative Per cent
Never	12.00	6.00	6.00
Rarely	37.00	18.50	24.50
Sometimes	97.00	48.50	73.00
Often	45.00	22.50	95.50
Always	9.00	00 4.50	100.00
	200.00	100.00	

Table 3 above shows the distribution of research data based on the variable behavior of people who are divided into five levels categories in describing the condition of society.

Categories respondents with behavioral never obtained for 6.00% or 12 of the 200 total respondents, behavior is rarely obtained at 18.00% or 37 of the 200 total respondents, the behavior is sometimes obtained by 48.50% or 97 of the 200 total respondents, the behavior is often obtained at 22.50 % or 45 of the 200 total respondents and the latter behavior is always obtained 4.00 or 9% of the 200 total respondents.

From these results it can be concluded that the tendency of respondents to the research community behavioral variables are sometimes with the percentage of 48.50%.

# **Classical Assumption Test**

To determine whether the resulting model is a model that produces a linear estimator is not biased then it is necessary to test the symptoms of deviation assumptions of classical models. Classical assumptions that must be met to get a good model is normality, non multicolinierity, non heteroskedastisitas.

*1. Normality:* One of the easiest look residual normality is to look at the histogram graph that compares the observation data with near-normal distribution. But sometimes see this histogram can be misleading, especially to small sample size. Criteria decision making with analysis chart (normal probability). If the data spread around the diagonal line and follow the direction of the diagonal, then the model meet the assumption of normality. If the data are spread far from the diagonal line, the model does not meet the assumption of normality (Santoso, 2014)

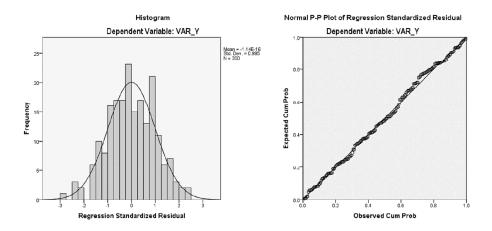


Figure 1: (a) Graph Histogram normality; (b) Normal P-P Graph Plot

By viewing a histogram or normal plot graphs it can be concluded that the histogram provides data pattern or distribution of the residual value shows a normal distribution (bell shape). While in the normal graph plots the data visible (in the form of dot) spread around the diagonal line and follow the direction of the diagonal, then the model meet the assumption of normality. If the data are spread far from the diagonal line, the model does not meet the assumption of normality. The second graph shows that the regression model to meet the assumptions of normality or the residue of a model can be considered normal distribution.

2. *Heteroskidastity:* Heteroskidastity test aims to test whether the models occur inequality of residual variance of the observations to other observations. If the variance of the residuals of the observations to other observations remained, then called and if different homoscedasticity called heterokedastisitas. Good model is the homokedastisitas.Jika no specific pattern, such as dots that no particular form regular patterns (wavy, widened and then narrowed), it indicates that there has been a Heteroskedastis.Jika no clear pattern, and the dots spread above and below the number 0 on the Y axis, it does not happen Heteroskedastis.

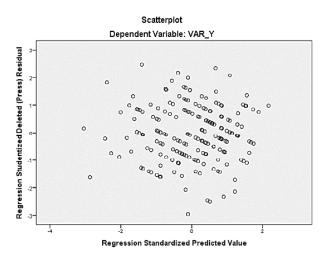


Figure 2: Scatter Plot heteroskedastisitas

Based on the results of the scatter plot seems that the plot is formed spread does not have a specific pattern or spread above and below zero on the Y axis as well as on the right and left on the X axis This indicates that the model is not the case with the relationship between independent variables residual value. Thus the assumption of non heteroskedastisitas models met.

3. Multicolinearity: Multicolinearity shows the relationship between the independent variables in the model. Good models do not show any symptoms of multicollinearity. Detecting the presence or absence of multicollinearity done by

looking at the value of VIF and Tolerance. If the value of VIF < 10 and the value of Tolerance > 0.10 then the model is free from multicollinearity (Santoso, 2014). Here is a VIF and Tolerance generated:

TABEL 4: COLLINEARITY STATISTICS

Model	Tolerance	VIF
Attitude of community	.997	1.005
The community moivation	.997	1.005

From the table above shows that VIF of all independent variables in the model above is smaller than 10 and Tolerance value greater than 0.10. So it can be said to be a model free from multicollinearity. Thus non multikolinieritas on the model assumptions are met.

## Multiple Linear Regression Analysis

1. The correlation coefficient (R) and coefficient of determination (R-Square): The correlation coefficient (R) indicates how much the linear relationship and the direction of the relationship between the independent variables  $(X_1, X_2, \dots, X_n)$  simultaneously to the dependent variable (Y). The correlation coefficient (R) ranges from 0 to 1, the value closer to 1 means that the relationship is getting stronger, otherwise the value closer to 0 then the relationship is getting weak. Determination coefficient (R-Square) shows how big the effect of independent variables able to explain the change in the dependent variable in a study. This value can be seen in Table 5 below.

IADEL 5. MODEL SUMMARI DEPENDENI VARIABLE						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.531	.282	.275	2.46416		

TABEL 5: MODEL SUMMARY DEPENDENT VARIABLE

Table 5 above shows the correlation coefficient (R) and the coefficient of determination (R-Square) obtained from analysis using SPSS program. The correlation coefficient (R) which is obtained for 0531, which means that the independent variable is the attitude and motivation of the people against the dependent variable is the behavior of the public have a linear relationship being.

The coefficient of determination (R-Square) were obtained for 0.282 or 28.20%. This suggests that the independent variable is the attitude and motivation of the people to the dependent variable that influences people's behavior has amounted to 28.20% while the remaining 71.80% influenced by other variables or factors outside of research.

Furthermore, to see whether all the independent variables included in the model have influence together on the dependent variable is usually called simultaneous

testing. Simultaneous testing done by looking at the value of Sig. provided that if the Sig. < 0.05 means the models have influence together on the dependent variable and vice versa, the value tersebutdapat seen in Table 6 below.

TABEL 0. ANOVA DEFENDENT VARIABLE							
Model	Sum of Squares	df	Mean Square	F	Sig.		
Regression	469.392	2	234.696	38.652	.000 <sup>b</sup>		
Residual	1196.203	197	6.072				
Total	1665.595	199					

TABEL 6: ANOVA DEPENDENT VARIABLE

Then to perform partial test or test aims to determine the regression coefficients of the variables used or not significant to the regression model obtained, this partial test can be done by looking at the value of Sig. (P-value) provided that if the Sig. < 0.05 means that the variable of the model in use is significant and vice versa, the value can be seen in Table 7 below.

Model	Unstandardized Coefficients		Standardized Coefficients		
	В	Std. Error	Beta	t	Sig.
(Constant)	13.409	2.233		6.006	.000
Attitude community $(X_1)$	.514	.061	.513	8.485	.000
The community motivation $(X_2)$	.081	.041	.120	1.985	.048

TABEL 7: COEFFICIENTS DEPENDENT VARIABLE

Table 7 above shows the results of the analysis in the form of independent variables on the dependent variable in this study was obtained with a coefficient equation model constants and coefficients of the variables in the column unstandardized Coefficients B produces the following equation:

$$Y = 13.409 + 0.514 X_1 + 0.081 X_2$$

Dimana :

Y = the behavior community

 $X_1$  = the attitude community

 $X_{2}$  = the community motivation

Then it can be seen in Figure 3 in the form of a research model by using multiple linear regression analysis and its influence between independent variable is the attitude and motivation of the people to the dependent variable is the variable behavior.

From Figure 3 shows that the effect obtained for 0.513 between the variable attitudes toward people's behavior and then obtained the effect of 0.120 between motivation variables to variable behavior.

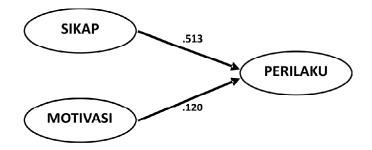


Figure 3: Multiple Linear Regression Model Research

# 2. Research Hypothesis Testing

Influence Attitudes Toward Community Behavior

Hypothesis :

H<sub>0</sub>: community attitudes affect the behavior of community

H<sub>1</sub>: The attitude of the public has no effect on people's behavior

Basic Decision:

 $H_0$  rejected if the value Sig. < 0.05

 $H_0$  accepted if the value Sig. > 0.05

From the analysis of values obtained Standardized Coefficients Beta from the variable attitudes toward positive behavioral variables for 0513 and the Sig. obtained for 0.000 is smaller 0.05 then  $H_0$  is accepted and  $H_1$  rejected. Based on these results, which means people's attitudes positive and significant impact on people's behavior that can be interpreted that if the attitude of society the higher the public's behavior the higher environmental or otherwise.

Effect of Motivation on Public Behavior

Hypothesis :

H<sub>0</sub>: Motivation community affect the behavior of community

 $H_1$ : Motivation community has no effect on community behavior Basic Decision :

 $H_0$  rejected if the value Sig. < 0.05

 $H_0$  accepted if the value Sig. > 0.05

From the analysis of the Standardized Coefficients Beta values obtained from variable to variable behavior motivated by positive 0.120 and the Sig. obtained for 0.048 is smaller 0.05 then  $H_0$  is accepted and  $H_1$  rejected. Based on these results, which means motivation people positive and significant impact on people's behavior that can be interpreted that if the attitude of society the higher the public's behavior the higher environmental or otherwise.

# Discussion

Management of river banks is a very important effort as a result of environmental degradation of watersheds in Indonesia are caused by the management of natural resources that are not environmentally friendly and increasing the potential for regional sectoral ego and ego because of utilization and use of natural resources in the watershed involves the interests of various sectors, administrative regions and disciplines. Therefore Watershed Management organized through planning, implementation, participation and empowerment, funding, monitoring and evaluation, supervision and management information systems utilize stream flow.

1. Influence Attitudes Toward Community Behavior: Influence public attitudes towards behavior that is obtained in this research for 0.513. Thus the influence of attitude tends to be dominant in changing people's behavior, especially in the implementation of rural infrastructure development program. The attitude of the components of cognitive (related to mind), affective (associated with feelings), and conative (related to the tendency to act) that integrate with each other to understand, feel, and behave towards something.

Based on these results when linked with the theory of reasoned action (Ajzen, 2005) said that attitudes influence behavior through a rigorous process of decision making and reasoned, and the impact is limited to three things, namely: (1) the behavior is largely determined by the general attitude, but by a specific attitude towards something; (2) behavior is influenced not only by the attitude, but also by subjective norms, namely beliefs about what others want us to behave; and (3) attitudes toward a behavior shared subjective norms establish an intention or an intention to behave in certain ways.

2. Effect of Motivation on Community Behavior: Influence public attitudes towards behavior that is obtained in this study amounted to 0.120. Thus the influence of motivation tends to weak in changing people's behavior, especially in the implementation of rural infrastructure development program. The motivation in this case is a boost from within and from outside that directs individuals to act in accordance with the interests to be achieved.

In line with the views expressed by Hull (1996), which asserts that a person's behavior is influenced by motivation or encouragement by holding the interests of fulfillment or satisfaction of the needs that exist in the individual. Further explained that the behavior does not arise solely because of the encouragement that stems from individual needs, but also because of the factors studied. The boost factor is conceived as a collection of energy that can activate the behavior or as a motivational factor, where the incidence of behavior according to Hull is a function of three things: the strength of the impulse that is in individuals; acquired habit of learning outcomes; as well as the interaction between the two.

#### Conclusion

From the analysis of the independent variables on the dependent variable in this study was obtained with a coefficient equation model constants and coefficients of variable yield equation  $Y = 13.409 + 0.514 X_1 + 0.081 X_2$ . Standardized Coefficients Beta value of a variable attitude towards positive behavioral variables for 0.513 and the Sig. obtained for 0.000 is smaller 0.05 then H<sub>0</sub> is accepted and H<sub>1</sub> rejected. Based on these results, which means people's attitudes positive and significant impact on people's behavior that can be interpreted that if the attitude of society the higher the public's behavior the higher environmental or otherwise. Standardized Coefficients Beta value of the variable motivation towards positive behavioral variables for 0.120 and the Sig. obtained for 0.048 is smaller 0.05 then H<sub>0</sub> is accepted and H<sub>1</sub> rejected. Based on these results, which means motivation people positive and significant impact on people's behavior that can be interpreted that if the attitude of society and H<sub>1</sub> rejected. Based on these results, which means motivation people positive and significant impact on people's behavior that can be interpreted that if the attitude of society the higher the public's behavior that can be interpreted that if the attitude of society the higher the public's behavior that can be interpreted that if the attitude of society the higher the public's behavior that can be interpreted that if the attitude of society the higher the public's behavior that can be interpreted that if the attitude of society the higher the public's behavior the higher environmental or otherwise. From the description means that the tendency of dominant attitude variable (being) affected behavioral variables than the variables of motivation.

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