

ENVIRONMENTAL EFFECT ON KNOWLEDGE COMMUNITY PARTICIPATION IN THE PRESERVE THE ENVIRONMENT IN THE COASTAL LAKE TEMPE SOUTH SULAWESI

Muhammad Nur, Gufran Darma Dirawan, Mulyadi and
Nurlita Pertiwi

This study aims to determine the influence of environmental knowledge society in preserving the environment in the coastal region of South Sulawesi Tempe Lake. This research was conducted in the coastal areas of Lake Tempe South Sulawesi. Pnelitian population is all the people who live in coastal areas Tempe Lake Wajo South Sulawesi. The number of samples is 200 persons selected by simple random sampling method. Data were collected using a survey method with interviews directly or indirectly to the respondents using research instruments. Descriptive analysis is used in the presentation of the data, the data size, the size of the central, as well as the size of the deployment. Inferential analysis was used to test the hypothesis by using SEM (Structural Modeling Equation). The results of SEM analysis showed that the positive effect on the environmental knowledge of participation to preserve the environment.

Introduction

Tempe Lake has suffered environmental damage that economic function as a source of freshwater fisheries and ecological functions are also impaired, and even lead to floods that occur every year. In the management and utilization of freshwater lakes for fishing, people using methods that are not environmentally friendly and less policy attention to environmental aspects.

Environmental quality issues Tempe Lakes region can not be separated from the activities and community participation in preserving the environment. Low community participation in environmental conservation Tempe lake region and factors that mengaruhinya deemed necessary to do research on the “ knowledge of environmental influences on public participation in environmental conservation in the region of Lake Tempe South Sulawesi “which empirically formulated author of several studies or theoretical model .

According to Conant (1995)¹⁾, in a static view of placing knowledge as a series of principles, and theories postulate intertwined with a lot of information regularly. According to Rich (1981)²⁾, knowledge is classified into five (5) sections, namely: (a) practical knowledge (b) intellectual knowledge, (c) the knowledge to answer that are not intellectual curiosity (d) spiritual knowledge (e) knowledge is not desired

Address for communication: Muhammad Nur, Gufran Darma Dirawan, Mulyadi & Nurlita Pertiwi, Post Graduate Program, Makassar State University, E-mail: (m.nurprima21@yahoo.co.id), (gufrandarma@yahoo.com)

(“unwanted knowledge) about something beyond one’s attention, something that is obtained by accident.

Participation is participation, involvement and participation of a person both as individuals and as a group in a particular activity. The definition of participation by Roger Hart in Adams (1998: 29)³⁾ states that participation is a process of mutual exchange of decisions that affect one’s life and the lives of the people who are nearby.

Research Methods

The research was conducted in the area of Lake Tempe Wajo South Sulawesi Province. The geographic location of the Wajo research, research time is planned for six months from January 2013 to July 2013. Based on the objectives to be achieved, the goal of this research is the people who live in the area of Lake Tempe in Wajo South Sulawesi Province. The population in this study were all people who live in the region of Lake Tempe Wajo South Sulawesi. The number of samples is 200 persons selected by simple random sampling method.

Primary data was collected using a survey method with direct or indirect interviews with respondents, using questionnaires, which were distributed questionnaires to be filled out and returned, or can also be answered with the supervision of researchers. Respondents will be distributed questionnaire developed specifically for this study. Inferential analysis of data used to test the hypothesis by using SEM (Structural Modeling Equation) which is operated by AMOS.

Results and Discussion

Characteristics of Respondents

Communities selected as respondents in this study were people who live in the region of Lake Tempe consisting of 4 districts in Wajo. These four sub-districts selected District of Tempe, District Sabbangparu, District and Sub-District Tanasitolo Belawa. Respondents were selected to have characteristics that vary by sex, age, education level, and the amount of revenue. The number of respondents in each district, each 50 people, bringing the total respondents were 200 people. Determination of the same number of respondents in all the districts adapted to a number of people who showed the difference is not too large based on data from BPS, (Anonymous, 2012)⁴⁾.

By sex, there are men 81% and women 19% of the respondents as many as 200 people with a composition that is almost evenly in all districts.

Age Respondents were sampled in this study ranged from 23 years up to 58 years with an average of 39 years. Based on age classification, the majority(84%) of respondents have between 30-49 year age range as in Fig.

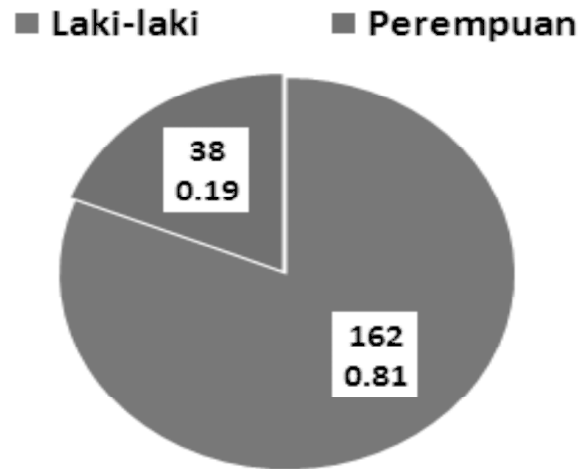


Figure 1: Percentage of Respondents by Gender

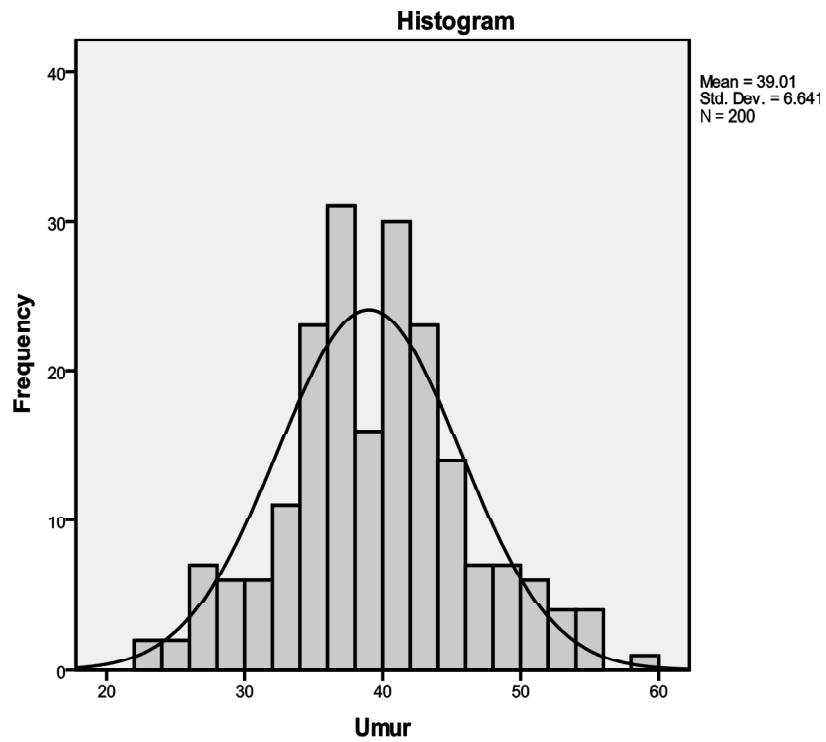


Figure 2: Age Distribution of Respondents

Based on the educational level of the respondents were selected in this study, the category of education obtained from elementary school/had not completed until the scholar/diploma. Most respondents had secondary school education up to high school level par with the percentage reached 73%. Variasi based districts have shown that the percentage of respondents who had elementary education/not at school is relatively high in the District Sabbangparu and Belawa, whereas a higher percentage of educated Degree/diploma is quite high in the District Tempe.

TABLE 1: PERCENTAGE OF RESPONDENTS EDUCATION LEVEL

Sub-district	Level of Education				Total
	Elementary school	Junior High School	Senior High School	Degree	
Sabbangparu	10	18	20	2	50
(%)	5,0%	9,0%	10,0%	1,0%	25,0%
Tempe	5	12	24	9	50
(%)	2,5%	6,0%	12,0%	4,5%	25,0%
Tanasitolo	7	15	23	5	50
(%)	3,5%	7,5%	11,5%	2,5%	25,0%
Belawa	9	13	21	7	50
(%)	4,5%	6,5%	10,5%	3,5%	25,0%
Total	31	58	88	23	200
(%)	8,5%	43,5%	40,5%	5,7%	100,0%

Source: The results of the data analysis, 2014

According to the classification of the income of respondents who selected samples showed that nearly half (42.0%) of respondents income of between Rp. 1.500.000, - up to 2.250.000, - per month. Variations in revenue based on the tendency of the districts showed that the percentage of low income is relatively higher in the District Sabbangparu while the percentage of high-income greater in the District Belawa.

TABLE 2: PERCENTAGE OF RESPONDENTS INCOME LEVEL

Sub-district	Income					Total
	<Rp.750.000	Rp.750.000-1.500.000	Rp. 1.500.000- 2.250.000	Rp.2.250.000- 3.000.000	>Rp.3.000.000	
Sabbangparu	5	12	24	9	0	50
(%)	2,5%	6,0%	12,0%	4,5%	0,0%	25,0%
Tempe	3	25	20	2	0	50
(%)	1,5%	12,5%	10,0%	41,0%	0,0%	25,0%
Tanasitolo	0	9	27	11	3	50
(%)	0,0%	4,5%	13,5%	5,5%	1,5%	25,0%
Belawa	0	9	13	21	7	50
(%)	0,0%	4,5%	6,5%	10,5%	3,5%	25,0%
Total	8	55	84	43	10	200
(%)	4,0%	27,5%	42,0%	21,5%	5,0%	100,0%

Source: The results of the data analysis, 2014

Environmental Knowledge

The value of the total score for Environmental knowledge variable (X) of the 25 items of questions ranged from 3-24 with a mean \pm standard deviation = 15.32 ± 3.52 . If this value is divided by the number of question items (25 items) then obtained a yield of 0.60. Because the scale of environmental knowledge level between 0 to 1 (do not know and know) it can be said that the average level of knowledge communities in Lake Tempe pesisir classified as moderate or slightly above average.

Furthermore, the maximum value that can be obtained by each respondent for the 25 item questionnaire was 25, while the minimum is the maximum amount minus the amount 0. If the maximum amount minus the amount minimum divided by 5 categories (very high, high, medium, low, and very low), then the frequency distribution can be explained in Table 3.

TABLE 3: DISTRIBUTION OF ENVIRONMENTAL KNOWLEDGE

<i>Level</i>	<i>Score Interval</i>	<i>Frequency</i>	<i>Percentage</i>	<i>Cumulative percentage</i>
Very Low	0 - 5	1	0,50	0,50
Low	6 - 10	16	8,00	8,50
Moderate	11-15	86	43,00	51,50
High	16 -20	82	41,00	92,50
Very High	21-25	15	7,50	100,00
Total		200	100	100

Source: Primary Data Processing Research, 2014

Participation Preserving the Environment

Total score calculated value of 25 items of questions and 200 respondents, the average value obtained in the variable Participation respondents Preserving the Environment (Y) ranging from 46-112 with a mean \pm standard deviation = 76.96 ± 13.54 . Once the average value is divided by the number of question items (25 items) then obtained an average of 3.08. This value shows that the average level of participation to preserve the environment of coastal communities Tempe Lake moderate.

Furthermore, the maximum value that can be obtained by each respondent for the 25 item questionnaire was 125, while the minimum is 25. If the maximum amount minus the minimum amount divided by 5 categories (very high, high, medium, low, and very low), then the frequency distribution can be explained in Table 4.

Effect of Environmental Science Against Participation

The results of SEM analysis showed that the value of environmental knowledge with CR = 4393 significantly (P < 0.05) positive effect on participation to preserve

TABLE 4: DISTRIBUTION OF PARTICIPATION PRESERVING THE ENVIRONMENT

<i>Level</i>	<i>Score Interval</i>	<i>Frequency</i>	<i>Percentage</i>	<i>Cumulative percentage</i>
Very Low	25 - 45	0	0	0
Low	46 - 65	43	21,50	21,50
Moderate	66-85	100	50,00	71,50
High	86 - 105	55	27,50	99,00
Very High	106-125	2	1,00	100,00
Total		200	100	100

Source: Primary Data Processing Research, 2014

the environment. These results reject the hypothesis that knowledge does not affect the participation of preserving the environment or accept the hypothesis that environmental knowledge affects the participation of environmental conservation.

In accordance with the estimate value weighted regression results (0.461), it can be interpreted that the level of participation to preserve the environment in the coastal communities of Lake Tempe likely to increase by 46.1% a 100 percent increase in knowledge or it can be said that the level of participation tends to increase almost half of any increase environmental knowledge.

Influence and a positive correlation between knowledge of the environment with the participation of preserving the environment is very reasonable because of the tendency of a person to act or do very much influenced by his knowledge of the case or matter to be done. Knowledge of someone about something very big influence on the underlying background to do something and knowledge of the impact of actions and actions will determine the person in the act and act (Bloom, 1981)⁵). In the concept of participation in environmental conservation measurable indicators to plan, maintain and improve the environment, the participation of individuals and communities is influenced directly by the level of knowledge on the environment (Branden, 1996)⁶). Communities will participate both in planning, maintaining and improving the environment because they know the various aspects of the environment and they understand the impact it will have when they participate or not in preserving the environment(Chiras, 1982)⁷).

The results showed a positive correlation effect and gained knowledge on participation in this study are consistent with results of previous studies include: Research Ahmad Yani (2010)⁸) concerning the participation of employees in improving environmental quality at PT. Antam, that employee participation in preserving the environment is influenced by environmental knowledge, perceptions about the climate, and the motivation to live a healthy life. Furthermore, Research Mulyadi (2007)⁹) and Dirawan (2007)¹⁰) on Community Participation in Improving Quality of the urban environment in Makassar, it was found that the participation of people affected by variable environmental knowledge, environmental motivations, attitudes toward the environment, environmental awareness, education and income levels. From the findings, it can be said that the level of participation

from the community in preserving the environment is influenced by environmental knowledge.

Conclusion

Based on the findings, it can be concluded that community participation in preserving the environment in the region of Lake Tempe directly influenced by the knowledge of the environment in environmental conservation.

Reference

- Akhmad Yani, (2010), *Influence Perception On Organizational Climate, Air Pollution Awareness, Motivation Healthy Living Against Employee Participation In Environmental Conservation Function, (A Survey of PT. Antam Tbk)*. Graduate University of Jakarta.
- Anonymous, (2012). Biro Pusat Statistik Wajo Regency.
- Bloom, Benyamin S. (1981). *Taxonomy of Education Objectives, The Classification Education Goals: Handbook Cognitive Domine*. New York: David Mc. Kay Company, Inc.
- Branden, Nathaniel. (1996). *Self-Relience and the Accountable Life; Taking Responsibility*. New York: Simon & Schuster Rockefeller Center.
- Chiras, Daniel D. (1982). *Environmental Science a Frame Work for Decision Making*. California: Cumming Publi-shing Company Inc.
- Conant, James B. (1995). *“Is it Science” Science and The Method*, Editor: CA Qadir. Basco translation Carvalla, Sonny Keraf A. and Andre Ata Ujan. Jakarta: Yayasan Obor Indonesia.
- Dirawan, G. D. (2007). *The Role of Adat Coastal in Community Participation*. The Australian National: Canberra University.
- Hart, Roger A. (1998). *Children’s participation: The theory and practice of involving young citizens in community development and environmental care*. London: UNICEF.
- Mulyadi. (2007). *Public Participation in Improving Quality of the urban environment in Makassar*. Makassar State University Graduate
- Rich, Robert F. (1981). *The Knowledge Cycle*. London: Sage Pu-blications.