

**WETLANDS VIEWPOINT BASED ON ENGLISH EDUCATION DEPARTMENT
STUDENTS AT LAMBUNG MANGKURAT UNIVERSITY**

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Abstract: vocabulary mastery, especially related to wetlands also need to be considered deeply because it is a common area in Kalimantan. English Language Educational Department at ULM is on part of the Faculty of Teacher Training and Education which deals with many schools and students who live in a wetland area. Therefore, the knowledge about the surrounding areas and try to integrate the local knowledge or culture is necessary. This research is focusing on the English Language Educational Department Students' view with regard to their environment. It is expected if they know more about their surroundings, they can be more creative in integrating their knowledge in English and modified the material that is familiar to their future students. It is a qualitative research with 25 English Language Educational Department Students as the sample. The instruments are questionnaires, interviews, and documentation. The result of this research shows that the students of the English Language Educational Department mentioned that it is necessary to add more vocabulary and reading texts or journals related to wetlands in the Department. They also mention write some common vocabularies relate to wetlands.

Keywords: *Wetlands. Knowledge, Vocabularies, English*

INTRODUCTION

Wetlands provide many important services to human society. Especially in South Kalimantan where wetlands is an inseparable part of lives that have a tight connection with its economics and cultures. This explains why in recent years much attention has been directed towards the formulation and operation of sustainable management strategies for wetlands. In Lambung Mangkurat University (ULM), things related to wetlands are in its vision and mission for the

coming years. It is not without reason since ULM is one of the state universities in this province. Both natural and social sciences can contribute to an increased understanding of relevant processes and problems associated with wetlands. Hence, this research determined to discover the ULM students' views toward wetlands in South Kalimantan, especially the one from English Language Education Department. The main reason for conducting this study is due to the lack of similar studies in this field for the South Kalimantan province. Therefore, the result of this study is hoped to discover the views of ULM students toward wetland and their degree of understanding as well as interest toward it.

This research is conducted to find out the English Language Education Department students' views on South Kalimantan Wetlands. The research was conducted at Lambung Mangkurat University, English Language Education Department in Banjarmasin. The participants were 40 students from academic year 2013, 2014, and 2015 which were chosen by implementing random sampling technique to make collected data more reliable. This research is expected to give an input on the views of ULM students toward wetland and their degree of understanding as well as interest toward it. The result of this research also expected to be an additional source, especially to another researcher who wants to conduct research on the same topic

REVIEW OF RELATED LITERATURES

Wetlands Definition

Wetlands are an essential fraction of human civilization, meeting many crucial needs for life. Wetland plays a significant role in regional ecosystem, such as the regulation of climate, cleansing of environment and balancing of regional water. The wetland provides critical habitat for a large number of flora and fauna. Due to its combination on different aquatic and terrestrial conditions. Many flora and fauna which have adapted to these kinds of ecosystems and led to high varieties of their kind (Hails, 1997). Based on several estimates, the extent of the world's wetlands is generally thought to be from 7 to 9 million km², or about 4 to 6 percent of the land surface of the Earth (Mitsch and Gosselink 2000). It is strengthened by the statements of World Resources Institute (2005), wetlands cover an area larger than 1280 million hectares worldwide. Almost 86 % of the estimated total natural wetland area is found in tropical, subtropical, and boreal regions of the world whereas temperate zone wetlands contribute only about 14% of the world's natural wetlands.

Current State of Wetlands

According to Lambert (2003), wetlands are among the most threatened ecosystems on our planet. Most of the reason are related to the exploitations from humans, since they are degraded and converted to human uses more rapidly than any other ecosystem, and the status of freshwater species is deteriorating faster than for other species (World Resources Institute, 2005; WWF, 2012). Moreover, over than 50% of wetland areas were lost during the 20th century (World Resources Institute, 2005), the cause mostly due to conversion and drainage

(WWF, 2017). However, since wetlands are essentially characterized by hydrologic conditions, changes in water volumes and timing of flows are major threats (Zedler & Kercher, 2005).

Indonesian and South Kalimantan's Wetlands

In Indonesia, especially in South Kalimantan, wetlands are considered as significant aspect since most of their economy/social/culture. In ULM itself, wetlands should not only have recognized in terms of their characteristics, but also should give understanding to the community that the wetlands should be treated wisely to provide continuous benefits (ULM, 2017). There were many misappropriations occurred in the wetlands area, such as due to conversion and drainage, as stated before. However, very little has been done in as much as policy making and protection of wetlands is concerned, probably because they are wrongly regarded as wastelands that can be sacrificed for the sake of social welfare (Seyam et al., 2001; Mutyavaviri, 2006; Wuver, 2006). Some even think that wetlands are natural resources with no need for management (Mharapara et al, 1997; Mutyavaviri, 2006).

Government policies on the use of wetlands are not sound that this important resource continues to be degraded at alarming levels. Some of the policies were designed not based on the perceptions of the people residing around the wetlands. Thus, they tend to contradict what people ought to know and this result in poor implementation of policy recommendations. The lack of attention is predominant in communal areas where either very little research has been done or researches have been too unrealistic by ignoring local peoples' perceptions. It is in view of this gap that a qualitative assessment of impacts of human activities on wetland ecosystems merits attention. Hence, this research will focus on the English Language Education Department students' views toward wetlands and problem occurred around it, as well as their views on the correlation between wetland and South Kalimantan development, ULM, and ULM students.

RESEARCH METHODOLOGY

Approach and Type of Research

This research implemented qualitative approach. According to Lodico (2006, p.264) qualitative approach is the research that focuses on the study of social phenomena and on giving voice to the feelings and perceptions of the participants under the conducted research, this is based on the belief that knowledge is derived from the social setting and that understanding social knowledge is a legitimate scientific process.

The design of this research was descriptive research with qualitative approach. It means that the data collected was not in the form of number, but the data derived from interviews manuscripts, field note, personal documents, record memos, or other official documents. The purpose of qualitative study was to describe the empirical reality behind the phenomenon in depth, detailed and thorough. In this study, the necessary data collected for this study is collected using open-ended questionnaire.

Population and Sample

According to Fraenkel & Wallen (2006, p.93), population is the group of interest to the researcher, the group to whom the researcher would like to generalize the result of the study. The population in this research is all Lambung Mangkurat University Students of English Language Education Department.

As for the sample, Arikunto (2005, p.95) stated that sample is the part of population which represents the whole. The researcher implemented random sampling technique to make collected data more reliable. Hence, the chosen participant were 40 students from academic year 2014, 2013, and 2012.

Instrumentation

The device (such as questionnaire, test, interview and document) the researcher uses to collect data is called an instrument (Frankel & Wallen, 2006, p.112). In this research, the instrument implemented by the researcher is open-ended questionnaire. The purpose is to gather wider opinions from the participants since it is necessary for achieving the purpose of the study, which is to reveal the participants' knowledge and views related to wetlands and their views in the connection between wetlands, especially in South Kalimantan, with ULM.

RESULT AND DISCUSSION

Result

Wetlands are areas where water covers the soil or is present either at or near the surface of the soil all year or for varying periods of time during the year, including during the growing season. According to the answer from the given questionnaire, it could be concluded that all of the participants know about wetlands, the only difference is only on their level of knowledge regarding it. All of them also could give the correct examples of wetlands, such as marshes and ponds, the edge of a lake or ocean, the delta at the mouth of a river, low-lying areas that frequently flood, etc. Some of them even gave an example by stating the name of places in South Kalimantan, such as rice fields in the region of Gambut.

Wetland functions could be defined as a process or series of processes that take place within an area of wetland. These include the storage of water, transformation of nutrients, growth of living matter, and diversity of wetland plants, and they have value for the wetland itself, for surrounding ecosystems, and for people. As for the benefit of wetlands for the ecosystem /environment, they are almost the same with its functions.

According to the participants, wetlands are vital for the cycle of the environment due to its functions. First, it could conduct a water purification process by conducting an action similar to a strainer that filters harmful substances. When these substances enter an area of wetland, plants that are in wetlands will take these harmful substances into their roots.

Furthermore, they will change the harmful substances into less harmful ones before releasing them to the body of water. In addition, these substances may also be buried in wetland soil, so that the bacteria and other microorganisms in the wetlands area could break the substances to make them no longer harmful.

The second one is to protect the area around it from the flood. When an area floods with water, wetlands act like a giant sponge. This could be happened due to the living plants, and even the dead plant matters, in an area of wetland can absorb the extra water. Thus, it could help in slowing down the movement of this water to surrounding areas, which used as a residential area where people live.

The third one is to stabilize the shoreline. The wetlands could do this by using the plants that grow along the shorelines and banks which act as a buffer zone by dispersing the energy of the incoming water. Thus, provide stability by combining the soils with their roots. The fourth one is to recharge groundwater. The water that was absorbed by the living plants and the dead plant matters in the area of wetlands would be stored and then used as a point of groundwater discharge. These waters would furtherly be discharged as a local drinking water source for people who live around the wetlands area.

Last but not least is to maintain the streamflow. As stated before, wetlands along rivers and streams absorb energy and store water during storms which led to lessen the risks as well as damages of flash floods. Furthermore, the slow release of water that was absorbed and stored by the living plants and the dead plant matters in the area of wetlands would be released over time can also help the streams to keep flowing during drought periods. In addition, wetland areas also provide habitat for fish and wildlife, including endangered species. However, even though wetlands have many functions and benefits, misappropriations of wetlands cannot be avoided. These misappropriations lead to many problems.

Discussions

Wetlands Misappropriations and Problem Occurred from It

Most of the participants stated that the most problems occurred is flood and drought. In addition, they also stated other problems such as haze, forest fire, water pollution, decreasing soil fertility, land subsidence, and loss of flora and fauna habitat. They consider flood and drought as the most problem that occurred due to the essential features of wetlands are related to water management. Therefore, when the human around it conducts misappropriations, problems related to water cannot be avoided. For example, when the wetlands is converted into fields, housing, or industries, its' function will be disappeared, which led to flood since the water from the storm will directly go to the residential areas.

Another problem is drought since one of natural water is gone, the amount of water around it will be decreased, which led to drought. Furthermore, since the process of water management is disturbed or even gone, the harmful substances brought by water around wetland areas will not be filtered, and then lead to water pollution. In addition, when people convert wetlands into fields, housing, or industries by burning the wetlands, other problems such as forest-fire would likely occur due to many farmers in Indonesia still use it for

converting wetlands into fields. These forest fires would trigger another problem which is haze, just like the one occurred in 2014. Besides due to the conversion into fields, forest fires might also occur because of the low amount of water in the air due to the reduced amount of wetlands. In addition, the participants also stated that water pollution, soil fertility decrease meant, land subsidence, and loss of flora and fauna habitat would also happen due to the reduced amount of wetlands. Water pollution occurred due to one of the wetlands function is to filter water and harmful substances brought along it. Soil fertility decreasing might be happened because of the decreasing level of groundwater due to there is no wetlands to store the water.

Furthermore, the decreasing amount of groundwater will also lead to subsidence. Last but not least, loss of flora and fauna habitat. There were many flora and fauna that is making wetlands as part of their ecosystem. The reduced existence of the wetlands can bring certain animals and plants to the edge of extinction. Furthermore, it can lead to the destruction of the ecosystem itself.

Effort to Prevent the Misappropriation of Wetlands.

For the effort to prevent the misappropriation of wetlands, the participants stated that every effort to prevent it, even the smallest one, will lead to a better future. To be more specific, several efforts that they proposed are: Participating in programs that help protect and restore wetlands; Reporting illegal activity such as filling, clearing, or dumping in wetlands to government authorities; Picking up all litter and dispose it in appropriate trash containers; Keeping surface areas that wash into storm drains clean of pet feces, toxic chemicals, fertilizers, and motor oil, which eventually reach and impair our wetlands; Plant only native species of trees, shrubs, and flowers to preserve the ecological balance of local wetlands; Avoiding wetlands if we are expanding home or installing a shed; Using paper and recycled products made from unbleached paper; Using non-toxic products for household cleaning, lawn, and garden care; Doing reduce, reuse and recycle household items and waste; etc.

Related to the efforts of wetland preservation especially in South Kalimantan, participants have many ideas related to this topic. However, those ideas mostly around restoration, creation, and maintenance. Restoration is about restoring damaged wetlands to a state similar to their original condition, it is deemed important especially for the wetlands that are in the brink of destruction. Creation is about transforming non-Wetland areas (both dry and un-vegetated waters) into wetlands. We could do this if there is almost no longer wetlands in the area, and restoration is considered as impossible things to conduct. Last but not least is maintenance. It is about increasing one or more natural functions of wetlands that have never been excavated before and maintain the sustainability of wetlands, such as running regulations related to wetlands maintenance with the help of government.

Correlations Between Wetland and the Development of Economy/Social/Culture in South Kalimantan

It is also revealed from the questionnaire that the participants thought that there are correlations between wetland and the development of economy/social/culture in South Kalimantan. The correlation could be seen in terms of wetlands services, goods, and attributes. As Service, wetlands provide certain services such as filling and filtering groundwater, controlling floods or preserving some natural processes, all of which will benefit human and environmental interests. As Goods, wetlands will become a place/habitat to perform various activities as well as a place to produce various goods/commodities. And as attribute, wetlands will also be valued and valued by some community groups as it relates to the religion and social fabric of the local community as well as useful for the development of science and culture.

Related to the wetland management in South Kalimantan, the participants considered that the management is already good, however, it still needs to be improved, especially in terms of restoration, creation, and maintenance. Since it was found out that the amount of wetlands is still decreasing, it is strengthened by the result of Davidson's (2014) research which stated that the rate of wetland loss in at 64-71% since 1900 AD. As for the correlations between Lambung Mangkurat University (ULM) and ULM students with wetlands, the participants thought that there are tight correlations between ULM and wetlands, and tight correlations between ULM students and wetlands. It was due to ULM visions and missions that are related to it. As for the correlations between ULM students and wetlands, as the students of one of the biggest universities in South Kalimantan, they need to have the initiative to use their knowledge in order to help in restoration, creation, and maintenance of wetlands. Especially since most of the cultures and economies of South Kalimantan is inseparable with wetlands.

Since the development in certain regions, especially in South Kalimantan, is growing rapidly. The government needs solutions concerning the growth of regional development and the preservation of wetlands. Related to this topic, the participants have given many solutions, and all of them were saying that the number of socialization or lecturing about the benefits of wetlands to people in South Kalimantan. Hence, there will be cooperation between the government and the people of South Kalimantan to restore, create, and maintain wetlands.

Participants' Vocabularies Related to Wetlands

Since the participant of this research were English Language Teaching Department students, the researcher also asked whether they need to know more about the vocabularies and reading texts about wetland or not. All of the participants answered that it is necessary for them to know vocabularies and reading text, especially journals, related to wetlands. Mostly due to the reason that they are students of ULM which have a tight correlation with wetlands. Here is a table of vocabularies they know related to wetlands.

Table 1. Vocabularies Related to Wetlands from English Language Teaching Department ULM Students.

Table of Vocabularies Related to Wetlands

1	Abiotic	11	Acute Marc	21	Alluvial Deposit	31	Anti-Salt Barrier
2	Abstraction	12	Algae	22	Alluvial Plain	32	Aquaculture
3	Accretion	13	Algal Bloom	23	Alluviation	33	Aquatic
4	Acid	14	Alkali Flat	24	Alluvium	34	Aquatic Fauna
5	Acidification	15	Alkaline Sediment	25	Amphibian	35	Aquatic Plants
6	Alkalinity	16	Alloternic	26	Anadromous Fish	36	Aquifer
7	Alkalinity	17	Allopathy	27	Anaerobic	37	Aquifer Recharge
8	Alkalinity	18	Alluvial	28	Anadromous	38	Area
9	Adaptation	19	Alluvial Clay	29	Annual Maximum Series	39	Artesian
10	Ageing of Wetlands	20	Alluvial Cone	30	Anthropogenic	40	Artificial Flood
41	Artificial Marsh Creation	66	Biochemical Oxygen Demand (BOD)	91	Habitat	116	Prevalence
42	Artificial Wetland	67	Biodiversity	92	Humid	117	Purification
43	Assimilation	68	Biologically	93	Humus	118	Quarmer
44	Astata	69	Black Spruce	94	Hydrology	119	Regional Development
45	Autotrophic	70	Bass	95	Intermittently	120	Reptile
46	Autometer	71	Breeding	96	Inundated	121	Riparian
47	Autographic Rain Gauge	72	Burrows	97	Lakes	122	Saltwater
48	Backwaters	73	Carabid	98	Land	123	Saltwater
49	Barak	74	Cattail	99	Mammal	124	Seasonally
50	Bank Stabilization	75	Circumstances	100	Mammal	125	Sedat
51	Bar	76	Coastal Zone	101	Mangrove	126	Sediment
52	Barometer	80	Dart	108	Moss	136	Tamarack
53	Barometer	81	Distant	109	Mudflats	137	Terrestrial
54	Baseflow	82	Diverse	110	Nutrients	138	Tropical
55	Bathic Water Directorate	83	Ecosystem	111	Peatland	139	Tropics
56	Beach	84	Emergent	112	Permanently	140	Vegetation
57	Bed Load	85	Environment	113	Plant	141	Waterwater
58	Beckock	86	Evaporate	114	Plant Life	142	Water
59	Benthic Organism	87	Fertilize	115	Ponds	143	Water Chemistry
60	Benthos	88	Flood	127	Shallow Lakes	144	Water Hyacinth
61	Benthonic	89	Floodplains	128	Shrubs	145	Water Lily
62	Berm	90	Fresh Water	129	Silt	146	Waterlogged
63	Berm Ditch	102	Mangroves Forest	130	Soil	147	Wet
64	Bioassay	103	Marsh	131	South America	148	Wetland
65	Biochemical	104	Marshes	132	Straw	149	Wildlife
77	Conversation	105	Migrate	133	Stream		
78	Cypress	106	Mist	134	Submerges		
79	Dams	107	Mixture	135	Swamp		

From the distributed questionnaire, it could be seen that the English Language Teaching Department ULM students' vocabulary related to wetlands is quite wide. Hence it could be implied that they have an interest in wetlands and topics regarding it.

CONCLUSION

Wetlands are areas where water covers the soil or is present either at or near the surface of the soil all year or for varying periods of time during the year, including during the growing season. From the distributed questionnaire, it was found out that all participants know this. Examples of wetlands given by the participants are marshes and ponds, the edge of a lake or ocean, the delta at the mouth of a river, low-lying areas that frequently flood, etc. Some of them even gave an example by stating the name of places in South Kalimantan, such as rice fields in the region of Gambut. There are several functions of wetlands as stated by them. Which include the storage of water, transformation of nutrients, growth of living matter, and diversity of wetland plants. However, even though wetlands are important, there are some misappropriations that still occurred which lead to many problems. Most of the participants stated that the most problems occurred is flood, drought, haze, forest fire, water pollution, decreasing soil fertility, land subsidence, and loss of flora and fauna habitat. Nevertheless, these can be prevented by doing many efforts, even the smallest one, which will lead to a better future. Several efforts can be done are restoring wetlands that are in the brink of destruction, creating a new one to replace the old one, as well as maintaining wetlands that are still in good condition.

All of the things above must be done, since wetlands are important, especially for the development of our region. In addition, wetlands have deep correlation with our economics as well as our cultures.

SUGGESTION

Hence, ULM and its students should pay more attention to wetlands. From this study, it was found out that ULM students, especially the one from English Language Teaching Department have interest toward wetlands and things related to it. It could be seen from the answer given by them on the given questionnaire. Related to the findings of this research, it was suggested for the other researchers to conduct further research related to wetland, whether to ULM students or students from different institution in order to deepen and broaden the knowledge regarding the topic.

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