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# Secondary School Students Knowledge, Attitude and Practices Towards Water Pollution in Riverine Area of Ondo State

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#### Abstract

Water pollution has been a major problem facing people living in riverine area all over Nigeria. This has become life threaten to majority of people living in the area as well as visitors to the area. A descriptive action research design was adopted for the study and 3 instruments were developed for the collection of data. The population of the study comprises of all secondary school students in riverine area of Ondo State while 200 respondents were randomly selected from 10 schools 5 on the land and 5 on water. The questionnaire titled Environmental knowledge scale (EKS) Environmental Attitude scale (EAS) AND Environmental practice scale (EPS) were used to collect data for the study. Data generated were analyzed using descriptive statistics of mean, and standard deviation. The finding from the study shows that though participants are aware of actions that can pollute water, yet their attitude towards water pollution is negative.

**Key words**: Ilaje/Ese odo; Water pollution; Riverine area; Environmental attitude

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### **BACKGROUND TO THE STUDY**

Importance of water to human existence cannot be over emphasized; therefore water pollution can cause epidemic of disease as well as untimely death, not only among human beings but also among other living species. Water pollution can reduce productivity as no production can take place without water. In many parts of Nigeria, especially in the riverine areas water is their main source of livelihood because they are mainly into fish farming. The demand for fresh water is fast increasing at a greater rate across the world. However, recent statistic indicates that 1.2 and 2.4 billion people suffer from lack of safe water supply and secure sanitation respectively. In Nigeria more than half of the population is affected Oladapo (2012).

Ilaje and Eseodo local governments are one of the most populated local governments in Ondo State with a population figure of two hundred and seven thousand and fifty four (207, 054) Nigeria Policy Commission (2014). It has a shore live covering above 280km (Bent) the longest coast line in Nigeria crude oil producing areas. The local governments which were created by the federal government on October 1, 1996, consist of over six hundred (600) towns and villages.

One of the major environmental pollution that people living in riverine areas are facing is water pollution. In Ondo State, Ilaje and Eseodo are the two major local governments in the riverine areas, and the major pollution problems facing the area is water pollution. As the industrial revolution that started in 19<sup>th</sup> century progressed, water pollution became a major crisis. Factories found water sources, especially rivers, a convenient means of waste disposal chemical from farms, especially large farms found its way back to the river; hence there are many factors that contribute to water pollution. The belief that oil exploration is the only major source of pollution in riverine areas in Nigeria is not really true. Human factors which are gradual always affect or pollute water.

In Nigeria especially among the residents of riverine area, it is a belief that water pollution in the area is mainly as a result of oil exploration going on in the area. Many are not aware that other human factors also contribute to water pollution in the area, therefore this study appraise the knowledge and attitude of secondary school students in the river rine area of Ondo State towards water pollution. This study therefore, examine the knowledge attitude and practice of secondary school students of Ilaje community.

#### **RESEARCH OBJECTIVES**

The main objective of the study is to assess the knowledge and attitude of secondary school students in riverine area of Ondo State on the issue of water pollution. Its specific objectives include to:

i. Determine the knowledge of secondary school students in Ilaje, Eseodo local governments on water pollution;

ii. Determine the attitude of secondary school students in Ilaje, Eseodo local government towards water pollution.

#### **RESEARCH QUESTIONS**

Table 1

Two research questions were raised to guide the study:

i. What is the level of knowledge of students on water pollution in riverine area of Ondo state?

ii. What is the attitude of students in riverine area of Ondo state towards water pollution?

#### METHODS

The study adopted the descriptive survey design. The population for this study comprised all secondary school students in both Ilaje and Eseodo local government area of Ondo State. From the population, sample sizes of 200 participants were selected using multi-staged sampling technique. Five schools each were first selected from land and riverine areas after which students were randomly chosen. The study's participants were limited to SSS2. The rational for choosing these groups is that they are mature enough to listen to instruction and to fill the questionnaire with little assistance and will still be available for at least a year. Two (2) instruments were developed for data collection from the population. The instruments are environmental knowledge scale (EKS), environmental attitude scale (EAS).

| What is the Knowledge of Secondary | School Students in the Riverine Area of Ondo State on Water Pollution? |
|------------------------------------|--|
|                                    |  |

| Items   | SA (%)     | A (%)      | D (%)     | SD (%)    | Mean | Std. Dev. |
|---|------------|------------|-----------|-----------|------|-----------|
| Water brings life and sustain it                    | 48 (24.0)  | 116 (58.0) | 28 (14.0) | 8 (4.0)   | 3.02 | .74       |
| Nothing can be done without water                   | 76 (38.0)  | 60 (30.0)  | 56 (28.0) | 8 (4.0)   | 2.74 | 1.26      |
| One cannot survive at all without water             | 108 (54.0) | 60 (30.0)  | 20 (10.0) | 12 (6.0)  | 3.32 | .89       |
| All bodies of waters are good for human beings      | 72 (36.0)  | 68 (34.0)  | 20 (10.0) | 40 (20.0) | 2.86 | 1.30      |
| Nothing bad can happen to human through river water | 108 (54.0) | 52 (26.0)  | 36 (18.0) | 16 (2.0)  | 3.32 | .84       |

Table 1 revealed the knowledge of secondary school students about water pollution as follow 82% of the respondents strongly agree or agree that water is essential

to human existence, while 18 percent do not agree as such. This shows that they have positive knowledge towards water bodies as life sustaining.

| Table 2   |
|---|
| What Are the Attitudes of Students of Secondary School in Riverine Area Towards Water Pollution in Ondo |
| State?  |

| Items  | SA (%)    | A (%)      | D (%)     | SD (%)    | Mean | Std Dev. |
|--|-----------|------------|-----------|-----------|------|----------|
| Throwing garbage in the drainage is a natural way of managing waste          | 64 (32.0) | 104 (52.0) | 12 (6.0)  | 20 (10.0) | 2.46 | 0.76     |
| Excreting into water body does not constitute nuisance                       | 92 (46.0) | 60 (30.0)  | 28 (14.0) | 20 (10.0) | 2.56 | 1.07     |
| Environmental sanitation include taking care of water body                   | 56 (28.0) | 68 (34.0)  | 40 (20.0) | 36 (18.0) | 2.72 | 1.07     |
| Using chemicals to kill fish can not affect the water                        | 76 (38.0) | 56 (28.0)  | 32 (16.0) | 36 (18.0) | 2.81 | 1.28     |
| Leaving water on plain ground when raining                                   | 52 (26.0) | 20 (30.0)  | 48 (24.0) | 40 (20.0) | 2.70 | 0.79     |
| Throwing refuse to water body serve as food for fish                         | 60 (30.0) | 52 (26.0)  | 48 (24.0) | 40 (20.0) | 2.42 | 1.07     |
| Channel septic tank to water body is the best way of empting the septic tank | 92 (46.0) | 72 (36.0)  | 24 (12.0) | 12 (6.0)  | 3.2  | 0.89     |

Table 2 revealed the attitude of students towards water pollution as follow;85% either strongly agreed or agreed on the following; that using chemical to kill fish not

harmful, that channeling septic tank to water body provide food for fish and throwing refuse to water body does not constitute pollution.

#### **DISCUSSION OF FINDINGS**

This study examines the knowledge and attitude of secondary school students in the riverine area towards water pollution. Two research questions were raised. The result of the research question one which states; what is the knowledge of secondary school students in riverine area of Ondo state toward water pollution shows that students in the area are knowledgeable about what can pollute water. This finding is in line with Ajitoni and Oladapo (2013) who revealed that in most schools students have been exposed to how to keep water clean especially those actions that pollute water.

The result of research question two which examines the attitude of secondary school students in riverine area of Ondo state towards water pollution revealed that, despite their knowledge about what can pollute water, their attitude towards water pollution is negative as many students still believe, there is no harm in throwing refuse into drain, defecating into the water body, believing it will just wash away. This is contrary to the finding of Olagunju,(2002) who is of the opinion that knowledge always inform attitude, that your attitude towards anything will be due to your knowledge about the issue, and it is in contrary to Ogunri and Akinyode (2015), in which it was revealed that your knowledge about an issue may not necessarily inform your attitude towards it. People might know what they were planning to do might bring about violence and polution, yet they will go on in doing it.

### CONCLUSION

There are different beliefs all over the country about water pollution especially in riverine area. All the blames are always on the oil exploration that is going on in the area. Little attention has been given to other means of pollution. The findings from this work show that, the major culprits in water pollution in the area might not only be oil explorer, there are other ways in which water are been polluted. For instance, among the findings is the fact that people in the area see the water body as a major means of disposing their waste. This not only polluting the water body, but also blocking water ways, which result into government spending billions of naira if not dollars in dredging rivers every time, the money, if prevented can be used for other welfare infrastructure

# RECOMMENDATIONS

Based on the findings of the study, the following recommendation are made:

i. Curriculum planners should include water pollution in the secondary school curriculum in order for the students to be able to know the implication of water pollution to human existence.

ii. Environmental clubs should be created in all secondary schools for the purpose of awareness among members and use them, to give awareness to those out of school students.

iii. There should be emphasis on outdoor environmental training to always expose students to hazard in water pollution.

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