

# Students' Perception on Climate Change in Modibbo Adama University Yola, Adamawa State, Nigeria

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**Abstract:**-The study assessed students' perception of impact on climate change in their environment and academic programmes. All students of MAUTECH for 2011/2012 session constituted population of the study. Using simple random technique, a total of 150 students were randomly selected, 150 questionnaires were administered out of which 140 were correctly filled and returned. The data collected was analyzed by applying descriptive and inferential statistics through statistical package for social sciences (SPSS Version 20). Simple percentages and chi-square analysis were used in analyzing the data. All the respondents were students, 52.1% are within 15 – 25 years of age category, followed by 28.6% between 26 – 35 years, then 16.4%, 36 – 45 years and finally 46 – 55 age 2.9% had the least proportion and most of the respondents are undergraduates. Most of the respondent were single (75.7%) while married respondent were 23.6%. deforestation, natural viability, agricultural and industrial activities are factors that causes climate change as the results obtained from chi-square analysis ( $X^2 = 20.800$ ) was significant at 5%, thus null hypothesis was rejected as the result obtained from chi-square analysis ( $X^2 = 136.029, 48.029, 146.743$  and  $89.500$ ) was significant at 5%. Thus null hypothesis was rejected, i.e. climate change brings about increase in temperature, flooding, increase dry spell. Also the result obtained from chi-square analysis ( $X^2 = 58.686$ ) was significant at 5%, thus null hypothesis was rejected. Therefore, it can be inferred that climate change has effect on reading, lectures and examination.

**Keywords:** Students perception, climate change

## I. INTRODUCTION

Climate change has been described as one the major challenges of 21<sup>st</sup> century to conservation, biodiversity and ensuring sustainable use of natural resources. Two of the most pressing environmental issues facing our planet today are climate changes and biodiversity loss. There is a growing scientific consensus that climate change could present a major threat to biodiversity at both spaces and ecosystem level. Many ecosystem are threaten by climate change emancipating from non-sustainable management practices. The millennium ecosystem assessment, as well as recent report from inter governmental panel on climate change (IPCC), revealed that climate change is negatively impacting on natural resources and as one of the main drivers of biodiversity loss. Human society is also vulnerable to climate (Ayode, 1995).

A change in climate usually takes place over a long period of time at least 150 years with clear and permanent

impact on the ecosystem (Adebayo, 2010). Climate change therefore refers to a statistically significant variation in either mean state of the climate or in its variability. Thus climate change is expected to have serious environmental, economic and social impact on man and his environment (Adebayo, 2009). In particular to the rural farmers, students and the society in general.

## II. METHODOLOGY

This section presents methods employed to achieve stated research objective. It includes population and sample of the study, sampling technique, sources and method of data collections and data analysis. All students of MAUTECH for 2011/2012 session constituted population of the study. Using simple random sampling technique, a total of 150 students were randomly selected. Therefore, 150 questionnaires were administered out of which 140 were correctly filled and returned. The data collected was analysed by applying descriptive and inferential statistics through Statistical Package for Social Science (SPSS Version 20). Simple percentage and Chi-Square analysis were used in analysing the data.

## III. DATA PRESENTATION AND ANALYSIS

### Sample Characteristics

Table 1. Age of respondents

|                     | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------------------|-----------|---------|---------------|--------------------|
| Valid 15 - 25 years | 73        | 52.1    | 52.1          | 52.1               |
| 26 - 35 years       | 40        | 28.6    | 28.6          | 80.7               |
| 36 - 45 years       | 23        | 16.4    | 16.4          | 97.1               |
| 46 - 55 years       | 4         | 2.9     | 2.9           | 100.0              |
| Total               | 140       | 100.0   | 100.0         |                    |

Source: SPSS Output,

Table 2

| YEARS      | FREQUENCY | %     | VALID | CUMULATIVE PERCENT |
|------------|-----------|-------|-------|--------------------|
| 15-25YEAR  | 73        | 52.1  | 52.1  | 52.1               |
| 26-35YEARS | 40        | 28.6  | 28.6  | 80.7               |
| 36-35YEARS | 23        | 16.4  | 16.4  | 97.1               |
| 46-55YEARS | 4         | 2.9   | 2.9   | 100.0              |
| TOTAL      | 140       | 100.0 | 100.0 |                    |

Table 1 showed that most of the respondents were students within the 15-25 years age category, followed by students between 26-35 years (28.6%), students between 36-45years (16.4%) while students within 46-55years (2.9%) had the least proportion. This means that most of the respondents were undergraduates who stayed longer on campus than postgraduates.

Table 3. Marital status

|         | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-----------|---------|---------------|--------------------|
| Single  | 106       | 75.7    | 75.7          | 75.7               |
| Married | 33        | 23.6    | 23.6          | 99.3               |
| 22.00   | 1         | .7      | .7            | 100.0              |
| Total   | 140       | 100.0   | 100.0         |                    |

Source: Field Survey, 2012.

Table 2 showed the respondents’ distribution by marital status. Most of the respondents were single (75.7%) while married respondents were 23.6%.

Table 4 School of study

|       | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| SMIT  | 41        | 29.3    | 29.3          | 29.3               |
| SPAS  | 13        | 9.3     | 9.3           | 38.6               |
| SEET  | 8         | 5.7     | 5.7           | 44.3               |
| SAAT  | 12        | 8.6     | 8.6           | 52.9               |
| STSE  | 8         | 5.7     | 5.7           | 58.6               |
| SES   | 37        | 26.4    | 26.4          | 85.0               |
| SPGS  | 21        | 15.0    | 15.0          | 100.0              |
| Total | 140       | 100.0   | 100.0         |                    |

Table 3 showed the respondents’ distribution by school of study, that is, faculties of the respondents. Most of the respondents were from school of management and information technology (29.3%), followed by school of environmental science (26.4%) while SEET and STSE had the least proportion.

Table 5 Level of study

|        | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------|-----------|---------|---------------|--------------------|
| 100L   | 25        | 17.9    | 17.9          | 17.9               |
| 200L   | 14        | 10.0    | 10.0          | 27.9               |
| 300L   | 34        | 24.3    | 24.3          | 52.1               |
| 400L   | 12        | 8.6     | 8.6           | 60.7               |
| 500L   | 34        | 24.3    | 24.3          | 85.0               |
| Others | 21        | 15.0    | 15.0          | 100.0              |
| Total  | 140       | 100.0   | 100.0         |                    |

Table 5 showed respondents’ distribution by level of study. Most of the respondent were 500 level (24.3%) and 300 level (24.3%), followed by 100 level (24.3%), others (15.0%) while 400 level students had the least proportion.

#### IV. FINDINGS

##### *Students’ Perception on Causes of Climate Change*

Test of Hypothesis One: Deforestation, industrial waste, natural viability and agricultural activities do not cause climate to change.

Table 6 Causes of climate change

|                         | Observed N | Expected N | Residual |
|-------------------------|------------|------------|----------|
| Deforestation           | 53         | 35.0       | 18.0     |
| Industrial waste        | 37         | 35.0       | 2.0      |
| natural viability       | 35         | 35.0       | .0       |
| Agricultural activities | 15         | 35.0       | -20.0    |
| Total                   | 140        |            |          |

Source: Field Survey, 2012 (SPSS Output File)

Table 6 showed that deforestation, natural viability, agricultural activities and industrial activities are the factors which cause climate to change as the result obtained from chi-square analysis ( $\chi^2 = 20.800$ ) was significant at 5%. Thus null hypothesis was rejected.

##### *Students’ Perception on the effect of climate change on environment*

Test of Hypothesis Two: Climate change does not have any effect on environment

Table 7 Test Statistics

|             | Increase in temperature within the environment | Increase incidence of flood during the rainy season | Increase in dry spells period during the rainy season | Decrease in rainfall within the environment |
|-------------|--|---|---|---|
| Chi-Square  | 136.029 <sup>a</sup>                           | 48.029 <sup>a</sup>                                 | 146.743 <sup>a</sup>                                  | 89.500 <sup>a</sup>                         |
| Df          | 1  | 1   | 3   | 4   |
| Asymp. Sig. | .000   | .000  | .000  | .000  |

a. Significant at 5%.

Source: Field Survey, 2012 (SPSS Output File)

Table 7 showed that climate change has effect on environment as the result obtained from chi-square analysis ( $\chi^2 = 136.029, 48.029, 146.743$  and  $89.500$ ) was significant at 5%. Thus null hypothesis was rejected. It can be inferred, therefore, that climate change brings about increase in temperature, increase in incidence of flood during rainy season, increase in dry spells period during rainy season and decrease in rainfall within the affected environment.

*Students’ Perception on the effect of climate change on school activities*

Test of Hypothesis Three: Climate change does not have any effect on school activities

Table 8 School activities affected by climatic change

|             | Observed N | Expected N | Residual |
|-------------|------------|------------|----------|
| Reading     | 84         | 46.7       | 37.3     |
| Lectures    | 46         | 46.7       | -.7      |
| Examination | 10         | 46.7       | -36.7    |
| Total       | 140        |            |          |

Source: Field Survey, 2012 (SPSS Output File)

Table 9 Test Statistics

|             | School activities affected by climatic change |
|-------------|---|
| Chi-Square  | 58.686 <sup>a</sup>                           |
| Df          | 2   |
| Asymp. Sig. | .000  |

a. Significant at 5%

Source: Field Survey, 2012 (SPSS Output File)

Table 9 showed that climate change has effect on school activities (reading, lectures and examination) as the result obtained from chi-square analysis ( $\chi^2 = 58.686$ ) was significant at 5%. Thus null hypothesis was rejected. Therefore, it can be inferred that climate change has effect on reading, lectures and examination.

*Students’ Perception on the relationship between studies and climate change*

Test of Hypothesis Four: There is no relationship between studies and climate change

Table 10 Test Statistics

|             | Relationship between studies and climatic changes |
|-------------|---|
| Chi-Square  | 96.114 <sup>a</sup>                               |
| Df          | 1   |
| Asymp. Sig. | .000  |

a. Significant at 5%

Source: Field Survey, 2012 (SPSS Output File)

Table 10 showed that there is significant relationship between studies and climate change as the result obtained from chi-square analysis ( $\chi^2 = 20.800$ ) was significant at 5%. Thus null hypothesis was rejected.

V. CONCLUSION

It is established from the study that student were aware of climate change and its impact on the environment and academic activities within the school environment. The student were able to develop adaptation strategies in a way that enables them to constantly cope with an erratic impact of climate change within their environment.

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