

To Study the Attitude of Elementary School Teachers towards Environment Education in East Kameng, Districts of Arunachal Pradesh

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Abstract: *In the present study researcher intended to measure the level of attitude of elementary school teachers serving in East Kameng district of Arunachal Pradesh towards environmental education. For collection of data the researcher used descriptive-cum-survey method. The researcher collected a total of 100 teachers as sample was randomly selected. For collecting information and data researcher employed self developed tools to measure the level of teachers' attitude towards environmental education. To measure the attitude of teachers the researcher used Likerts 5 point scales are as: SA, S, U, D and SD which was used to find the level of significance different exists among the teachers serving in elementary school of East Kameng district of Arunachal Pradesh. In tabulation and interpretation of data researcher used some statistical techniques as Mean, SD and t-test to find out the level of significance of difference exist among the teachers attitude with respect to their gender, locality, tribes and disciplines. In the result, it was found out that majority of the teacher have possessed average level of attitude towards environmental education. The result reveals that there does not exists significant difference in their attitude towards environmental education. The mean scores of various variables are as Male (53.8), Female (52.5), Tribal (52.6), Non-tribal (54.3), Urban (56.3), Rural (50.7), Arts (52.3) and Science (54.5) which is not satisfactory in present scenario of environmental problems in the world.*

Keywords: Environmental Education, Discipline, Locality, Sex and Tribes

1. Introduction

Environment is the source of living organism including human being without which there is no possible of life on this mother earth. Human being depend on the environment since time immemorable as they go to forest collect wild fruits, firewood etc. but their activities does not affect on the environment as the population was very low in number and their needs also limited as compare to present situation. During the ancient period resources were unlimited and easily cope with the activities of the people within short period of time. So, in that time there was no matter of environmental pollution as pollution of Air, Water and soil. There was no matter of Global Warming, Acid Rain, Ozone layer depletion etc.

The environmental problems was visible after 13th Century onwards as slowly human being start to settled down, became civilized and learnt how to cultivate, side by side, number of population also increase very rapidly. Man also started to encroached environment to satisfy their needs and urbanization also coming up, extended their settlement areas and consumed more resources his activities affect on the environment which cause to lead deforestation. Later industrial revolution also coming up, the consumption of raw material such as wood, mineral, coal and fossil fuel increased very high and then pollution of air, water and soil became visible in the world.

After observed rampant increase of environmental pollution the man realised that the existence of human race itself was danger and to survive as a race it was necessary to educate man about environment and its repercussion could be minimised as earliest through education. The area of environmental education has been discussed thoroughly at

several national and international seminars, workshops and conferences. The some of the importance workshops, seminars and conference were held and discuss in various country and continents are as:

1970- April, 22nd Earth Day was observed. The US Environmental Act defined the goal of Environmental Education. The IUCN Sponsored International Conference on Environmental Education in School curriculum", at Nevada. 1972- UN sponsored "Conference on Human Environment" at Stockholm, Sweden. In October United Nation Environment Program (UNEP) was established with its head quarters at Nairobi, Kenya. 1975- UNESCO in cooperation with UNEP launched the UNESCO-UNEP International Environmental Education Program (IEEP) Paris. In October under IEEP and "International Environmental Education Workshop" was held in Belgrade, Yugoslavia, which led to Belgrade Charter" Formation. 1976-77 Many meetings were held in Africa Arab states, Asia Pacific, Europe, North America, Latin America and Caribbean region. 1977- The International Conference on Environmental Education was organized in October in Tbilisi, Georgia, USSR that resulted in formation of "The Tbilisi Declaration".

The chief objectives of environmental education are:

- 1) Awareness: To help individuals and social groups acquire and awareness of and sensitivity to the total environment and its allied problems.
- 2) Knowledge: To help individuals and social groups acquire basic understanding of the total environment and its associate problems.
- 3) Attitude: To help individuals and social groups acquire social values, strong feelings of concern for the

environment and the motivation for actively participating in its protection and improvement.

- 4) Skills: To help individual and social groups acquire the skills for solving environment problems.
- 5) Evaluation Ability: To help individuals and social groups evaluate environmental measures and education programmes in terms of ecological, political, economic, social and aesthetic and education factors and
- 6) Participation: To help individuals and social groups provide opportunity to take part in environmental awareness programme for solving environmental problems.
- 7) Develop a sense of responsibility and urgency regarding environmental problems to ensure appropriate action to solve those problems.

“Environmental Education is an integral process which deals with man’s interrelationship with his natural and manmade surrounding including the rate of population growth, pollution, resource allocation and depletion, conservation technology and urban and rural planning to the total human environment”. Environmental education is study of the factors influencing ecosystems, mental and physical health, living and working conditions, decaying cities and population pressures. Environmental education is intended to promote among citizens the awareness and understanding of environment our relation to it and the concern and responsible action to necessary to assure our survival and to improve the quality of life”. In the present situation man and environments are interrelated and there is interdependence in them. The nature or environment becomes a source of sorrow and in happiness, because the dust of earth, light and air of sky has the adverse affect on human being. Therefore, there is need of introduction of environmental education.

The public in rural areas, urban areas, slum areas, women and students, tribal and teachers in school, colleges and Universities as well as planners and decisions and policy makers, programme implementation and workers need to be educated about the environment.

So, environmental education is a process of providing learning experience to obtain knowledge, understanding, skill and awareness with attitudinal changes about man’s relationship with his natural and manmade surroundings which includes the relation of population, pollution, resource allocation, transportation, technology and urban and rural planning to the total human environment. Environmental education must utilized diverse learning environment and a broad array of educational approaches to teaching learning about and from the environment with due stress on practical activities and first hand experiences. It should help learners to discover the symptoms and real causes of environmental problems and thus develop critical thinking and problem solving skills. Environmental education should be a continuous life long process, beginning from pre-primary school and continuing through all formal and non-formal stages and should be inter-disciplinary discipline or making a holistic and balance perspective.

2. Objectives of study

- 1) To assess and compare the environmental attitude among

the Male and Female elementary school teachers of East Kameng, District of Arunachal Pradesh.

- 2) To assess and compare the environmental attitude among the Urban and Rural elementary school teachers of East Kameng, District of Arunachal Pradesh.
- 3) To assess and compare the environmental attitude among the Tribal and Non-tribal elementary school teachers of East Kameng, District of Arunachal Pradesh.
- 4) To assess and compare the environmental attitude among the Science and Arts elementary school teachers of East Kameng, District of Arunachal Pradesh.

3. Hypotheses

- 1) There is no significant different between the environmental education attitude mean scores of the Male and Female teachers serving in elementary school level in East Kameng District.
- 2) There is no significant different between the environmental education attitude mean scores of the Tribal and Non-tribal teachers serving in elementary school level in East Kameng District.
- 3) There is no significant different between the environmental educations attitudes mean scores of the Elementary School teachers teaching in Urban and Rural area schools of East Kameng District.
- 4) There is no significant different between the environmental education attitude mean scores of among the Arts and Science Teachers teaching in elementary school level in East Kameng District.

4. Methodology

The present study is an attempt to assess the level of environmental attitudes of elementary school teachers of East Kameng, district, in relation to variables like, sex, locality, race and discipline.

4.1 Sample

A sample of 100 elementary school teacher’s comprising 59 Male and 41 Female teachers. It was sub-categories as 47 teachers are selected from Urban and 53 teachers from Rural schools. Again, it was further sub-categories as 58 teachers are selected from Tribal and 42 teachers from Non-tribal community. Moreover, a sample of 54 teachers selected from Arts stream and 44 teachers from Science stream. Stratified random sampling techniques were used to select the sample. The tools used in the present study was environmental attitude scale and questionnaires developed by investigator himself. This test is essential to measures to what extent or degree of attitude of teachers about environmental problems like pollution, global warming, acid rain and its affect and protection, conservation of soil, forest, knowledge about air, water and land pollution and its causes and affect on living organism including human being.

4.2 Tools

The researcher used Environmental Attitude scale developed by investigator himself for measuring the attitude of teachers towards environmental education. The purpose of this test was to measure the level of attitude among the teachers

towards environmental education. This test consists of 50 open ended and 50 closed ended items concerning to environmental concept, pollution (air, water, land, noise including importance and degradation of environmental resources) and its control, causes of environmental pollution, energy and environmental pollution its affect on living organism including human being.

4.3 Procedures

The researcher personally visited all the selected sample school of East Kameng, District and there teachers were met individually for explaining the purpose of the study and instruction were given to them how to respond to the test questions. Further, clarifications were made on the questions if doubt raise from the respondents and they were requested to cooperate with the investigator for successful completion of this piece of research work.

4.4 Statistical Analysis

For analyzing the collected data the investigator used/ employed Mean, Median, Standard Deviation and T-test for present study in order to find out the level of significant of different exist between scored obtained by the sample variables like; Male-Female, Urban-Rural, Tribal- Non-tribal and discipline like Arts and Science stream.

As per the objective of the study the investigator used self-made items relating to Likert's 5 point attitude scales which was used to measures the level of attitudes of teachers towards environmental education. The Likert's 5 point attitude scales are as SA, S, U, D, and SD, which were used to find out the level of significant difference among the teachers working in East Kameng District. The details are put as under:-

Objectives 1: To Assess and Compare the Environmental Attitude among the Male and Female Teachers Teaching in Elementary School level in East Kameng Districts.

Hypothesis: There is no significant difference between the Environmental Education Attitude mean scores of the Male and Female Teachers Teaching in Elementary School level in East Kameng District.

Table 1: Environmental Attitude Mean Scores, Standard Deviation and t-value of the Male and Female Teachers towards environmental education

Group	N	Mean	SD	SE _D	't'-value
Male	57	53.8	27.5		
Female	41	52.5	27.1	5.58	0.23

Interpretation: The above **table-01** shows that the computed t-value came out to be (0.23) regarding the sex variable whereas the criterion t-value is 1.98 at .05 level of significance for 96 df. Here, the observed t-value is less than the criterion t-value. So, it is not significant. It indicates that there is no significant differences exist in the environmental attitude mean scores of male and female teachers. Therefore, the formulated null hypothesis "There is no significant different in the environmental attitude mean scores of male and female elementary school teachers working in East

Kameng District" is accepted. It implies that the male and female teachers working in the East Kameng District are having the same level of environmental attitude and possess almost equal environmental attitude mean scores shown by exhibiting average level of environmental attitude mean scores.

Objectives 2: To Assess and Compare the Environmental Attitude among the Tribal and Non-tribal Elementary School Teachers Working in East Kameng District.

Hypothesis: There is no significant difference between the Environmental Education Attitudes mean scores of the Tribal and Non-tribal towards environmental education.

Table 2: Environmental Attitude Mean Scores, Standard Deviation and t- value of the Tribal and Non-tribal Teachers towards environmental education

Group	N	Mean	SD	SE _D	't'-value
Tribal	58	52.6	27.3		
Non-tribal	42	54.3	26.1	5.39	0.32

Interpretation: The above **table-02** reveals that the computed t-value (0.32) is less than the criterion t-value (1.99) at .05 level of significance for 98 df. So, it is not significant. From which, it is understood that there is no significant difference in the attitude of tribal and non-tribal teachers towards environmental education. Therefore, the formulated null hypothesis "There is no significant difference in the environmental attitude means scores of tribal and non-tribal teachers working in East Kameng District" is accepted. Hence, it is interpreted that the tribal and non-tribal teachers are having the same level of environmental attitude mean scores shown by positive and favourable attitude towards environmental education.

Objectives 3: To Assess and Compare the Environmental Attitude among the Elementary Teachers Teaching in Urban and Rural area Schools in East Kameng District

Hypothesis: There is no significant difference between the Environmental Education Attitude mean scores of the Urban and Rural Teachers towards environmental education.

Table 3: Environmental Attitude Mean Scores, Standard Deviation and t-value of the Urban and Rural School Teachers towards environmental education

Group	N	Mean	SD	SE _D	't'-value
Urban	45	56.3	27.2		
Rural	53	50.7	26.1	5.41	1.04

Interpretation: The above **table-03** shows that the computed t-value came out to be (1.04) regarding the settlement variable whereas the criterion t-value is 1.98 at .05 level of significance for 96 df. Here, the observed t-value is less than the criterion t-value. So, it is not significant. Hence, it is concluded that the mean scores of attitude of urban and rural teachers do not differ significantly. In view of this, the formulated null hypothesis "There is no significant differences in the environmental attitude mean scores of urban and rural elementary school teachers working in East Kameng District" is accepted. The result reveals that both the

urban and rural teachers having same level of attitude towards environmental education and they have positive attitudes towards environmental education.

Objectives 4: To assess and Compare the Environmental Attitudes among the Arts and Science Teachers Teaching in Elementary School level in East Kameng District.

Hypothesis: There is no significant difference between the Environmental Attitude mean scores of the Arts and Science Teachers towards environmental education.

Table 4: Environmental Attitude Mean Scores, Standard Deviation and t-value of the Arts and Science Teachers towards environmental education

Group	N	Mean	SD	SE _D	't'-value
Arts	54	52.3	26.7		
Science	44	54.5	28.00	5.57	0.39

Interpretation: The above **table-04** reflects that the computed t-value (0.39) was not significant as this computed t-value (0.39) is less than the criterion t-value (1.99) at .05 level of significance for 96 df, in relating to discipline variables. From the result it is understood that there is no significant difference in the environmental attitude mean scores of arts and science teachers. Therefore, the formulated null hypothesis "There is no significant difference between the environmental attitudes means scores of Arts and Science elementary school teachers working in East Kameng District" is accepted and retained and it is interpreted that the Art and Science teachers do not differ in their level of attitude towards environment. It implies that the arts and science teachers working in the East Kameng district are having same level of attitude towards environmental education.

The main findings of Environmental Attitudes Test Scores of Elementary School Teachers of East Kameng District Categories in terms of sex, race, settlement and discipline are put as under:

- 1) **The Table-01** shows that the computed t-value came out to be (0.23) regarding the sex variable whereas the criterion t-value is 1.98 at .05 level of significance for 96 df. Here, the observed t-value is less than the criterion t-value. So, it is not significant. It indicates that there is no significant differences in the environmental attitude mean scores of male and female teachers. Therefore, the formulated null hypothesis "There is no significant differences in the environmental attitude mean scores of male and female elementary school teachers working in East Kameng District" is accepted. It implies that the male and female teachers working in the East Kameng district are having the same level of environmental attitude and possess almost equal environmental attitude mean scores shown by exhibiting average level of environmental attitude mean scores.
- 2) **The Table-02** reveals that the computed t-value (0.32) is less than the criterion t-value (1.99) at .05 level of significance for 98 df. So, it is not significant. From which, it is understood that there is no significant difference in the environmental attitude mean scores of tribal and non-tribal teachers. Therefore, the formulated null hypothesis "There is no significant differences in the environmental attitude mean scores of tribal and

non-tribal teachers working in East Kameng District" is accepted. Hence, it is interpreted that the tribal and non-tribal teachers are having the same level of environmental attitude mean scores shown by positive and favourable attitude towards environmental education.

- 3) **The Table-03** shows that the computed t-value came out to be (1.04) regarding the settlement variable whereas the criterion t-value is 1.98 at .05 level of significance for 96 df. Here, the observed t-value is less than the criterion t-value. So, it is not significant. Hence, it is concluded that the mean scores of attitude of urban and rural teachers do not differ significantly. In view of this, the formulated null hypothesis "There is no significant differences in the environmental attitude mean scores of urban and rural elementary school teachers working in East Kameng District" is accepted. It implies that the urban and rural teachers are having same level of environmental attitude shown by positive and favourable attitude mean scores towards environmental education.
- 4) **The Table-04** reflects that the computed t-value (0.39) was found not significant as this computed t-value (0.39) is less than the criterion t-value (1.99) at .05 level of significance for 96 df, in relating to discipline variables. From which, it is understood that there is no significant differences in the environmental attitude mean scores of arts and science teachers. Therefore, the formulated null hypothesis "There is no significant differences between the environmental attitudes mean scores of Arts and Science elementary school teachers working in East Kameng District" is accepted and it is interpreted that the Art and Science teachers do not differ in their level of attitude towards environment. It implies that the arts and science teachers working in the East Kameng District are having same level of environmental attitude and they had positive and favourable attitude towards environmental education.

4 Conclusion

From the above study it was found that most of the teachers are having average level of attitude towards environmental education which is not satisfying in the present scenario of environmental condition of the country and world as a whole. Everyone should have enough and sufficient knowledge, awareness and attitude of environment and thinking their future importance for survival of living organism including human being. If the present situation of environmental problem is continue the survival and existing of human race is also impossible in this planet earth. To save our mother earth, we should to educate the people and impart environmental education to the different group of people about environment and its importance and their future consequences. So, we should create awareness, disseminate the information about the importance of environments and its future problems and environmental education should be imparted to different group of people's like-Youths, Students, teachers, educationist, NGO members, farmers and fringe villagers. The teacher should be work as an agent of organising programme and disseminating knowledge through various activities like observing world Environment Day, World Forestry Day, World Water Day, Celebrating Van mohatsavana in the school.

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