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Awareness of university students about global warming in Allahabad district of Uttar Pradesh

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Abstract
In recent years, global warming has emerged as a significant threat to the environment. Keeping in view the awareness of University students about global warming, the present study was carried out in Allahabad district of Uttar Pradesh. Total 120 university students were selected from different department of Sam Higginbottom University of Agriculture, Technology And Sciences to assess the awareness about global warming. It was observed that maximum numbers of respondents (61.67 %) were found having medium level of awareness about global warming followed by low level (21.67%) and high level (16.66%) of awareness. The practice of environmentally responsible behaviour was not in accordance with the level of knowledge. Negative attitudes towards environment were also prevalent. Significant association of awareness was observed with education level of the respondents ($p<0.05$). Need exists to impart knowledge and develop positive attitudes on environmental issues among the university students.

Keywords: Awareness, Global Warming, University Students.

Introduction
Most climatologists regard the final decade of the twentieth century as the warmest in the past millennium (Albritton *et al.* 2001) [1]. Recently, there have been observations suggesting that 2005 may have been the warmest year on record. Rapid temperature increases in the Arctic have already produced a significant reduction in Arctic sea ice (Fisher *et al*. 2006) [2]. Reduced sea ice decreases the reflection and increases the absorption of sunlight in the Arctic, an almost "runaway" process that further amplifies global warming. Recent research has demonstrated that the Earth's energy budget is out of balance, with more energy captured from the Sun than is currently radiated back to space (Hansen *et al*. 2005) [3]. This makes global warming inevitable. This is *not due* to any measurable increase in the incoming solar energy, but to an increase in the amount of that energy captured and retained by the Earth.

In 2012 AD, World Health Organization (WHO) estimated that 5.5 million DALY's and 1,50,000 deaths was contributed to cardiovascular disease, diarrhea, malaria, injuries from flooding and malnutrition which are due to the consequences of climate change.

Global warming is inducing instabilities in the Earth's climate that we already know have many harmful effects. What we do not know yet is how serious the situation might become. The possibilities range from bad and costly to fix – such as saving many valuable coastal areas from flooding and fighting new and more pervasive diseases– to the much less probable but potentially catastrophic effects of a sudden, significant climate shift that could be difficult to reverse.

Materials and Methods
The study was conducted in Sam Higginbottom University of Agriculture, Technology and Sciences which was selected purposively because students from all most all the state of Indian are studying in this university. One hundred twenty respondents were selected randomly for the present study. A pre tested and semi-structured questionnaire was developed to collect information and distributed to all selected students with proper oral instructions to answer the questions. In order to maintain their confidentiality, the respondents were asked not to mention their names on the questionnaire. In order to combine the various responses relating to awareness, scores were assigned to each response. A score of 1 was given to each correct response and 0 to each incorrect response. Data entry and analysis was made by using Statistical Package for Social Science (SPSS) software (Version 20.0). Collected data were analyzed with the application of appropriate statistics.

Results and Discussion
It is revealed from the Table- 1 that majority of the respondents (61.67%) were male and 38.33 per cent were female, 44.17 per cent were of the age 21-23 years, followed by 34.17 per cent between the age group of 18-20 years and 21.66 per cent between 24-26 years. Most of the respondent's (54.17%) were from rural area followed by urban area (45.83%).

Table 1: Socio-demographic characteristics of the respondents. (N =120)

S. No.	Characteristics	Frequency	Percentage
1.	Age in years		
	18-20	41	34.17
	21-23	53	44.17
	24-26	26	21.66
2.	Sex		
	Male	74	61.67
	Female	46	38.33
3.	Place of residence		
	Rural	65	54.17
	Urban	55	45.83
4.	Class/Programme		
	Diploma	07	05.83
	Under Graduate	78	65.00
	Post Graduate	35	29.17
5.	Religion		
	Hindu	76	63.33
	Muslim	06	05.00
	Christian	38	31.67
6.	Socio Economic Status		
	Class-I	35	29.17
	Class-II	57	47.50
	Class-III	23	19.17
	Class-IV	05	04.16

It was observed from table 1 that 65.00 per cent respondents pursuing Under Graduate programme, 29.17 per cent post Graduate and only 5.83 per cent pursuing Diploma programme. Majority of the respondents (63.33%) were Hindu followed by 31.67 per cent were Christian and only 5.00 per cent respondents were Muslim. Similarly 29.17 per cent of the respondents belonged to Socio-economic class I, followed by 47.50 per cent Class-II, 19.17 per cent Class-III and only 4.16 per cent Class IV.

Table 2: Distribution of respondents by awareness towards Global warming. (N =120)

SL. No.	Awareness	Fully aware	Partially aware	Least Aware
1.	Familiarity about global warming.	32 (26.67)	88 (73.33.)	-
2.	Observed weather change in past five years.	66 (55.00)	35 (29.17)	19 (15.83)
3.	Global warming is considered as serious problem.	46 (38.33)	57 (47.50)	17 (14.17)
4.	Rapid increases in greenhouse gases are causing climate change.	49 (40.83)	55 (45.84)	16 (13.33)
5.	Rainfall pattern is changing due to global warming.	77 (64.17)	43 (35.83)	-
6.	Global warming affects human life.	76 (63.33)	39 (32.50)	05 (4.17)
7.	Global warming affects natural environment.	48 (40.00)	51 (42.50)	21 (17.50)

Figure shows in parenthesis are percentage.

The table 2 shows that 77.33 per cent respondents are partially and 26.67 per cent fully familiar about global warming, 55 per cent respondents reported that there are some changes in weather in past five years. It was observed that 47.50 per cent partially considered global warming as serious problem where as 38.33 considered as serious problem, 45.84 per cent partially and 40.83 per cent fully aware that greenhouse gases are causing climate change. Majority (64.17%) fully aware about rainfall pattern is changing due to global warming where as 35.83 per cent respondents are partially aware about that. It was also found that majority (63.33%) per cent respondents fully aware and 32.50 per cent fully aware about affects of global warming on human health where as 42.50 per cent partially and 40 per cent fully aware about affects of global warming on natural environment. Some respondents also found have least aware about weather change (15.83%), global warming as serious problem (14.17%), global warming affects natural environments (17.50%). Overall it was found that majority of the respondents are partially aware about global warming and its affects on human health and natural environments. The findings is in the line of Hegde at all (2012) [4]

Sources of information regarding global warming

Sl. No	Sources	Frequency	Percentage
1	Internet	52	43.33
2.	Radio	29	24.17
3	Television	23	19.17
4.	Friends	16	13.33
Total		120	100.00

The data revealed in the above table that the main sources of information for Global warming were internet (43.33%), radio (24.17%), television (19.17%) and friends (13.33%).
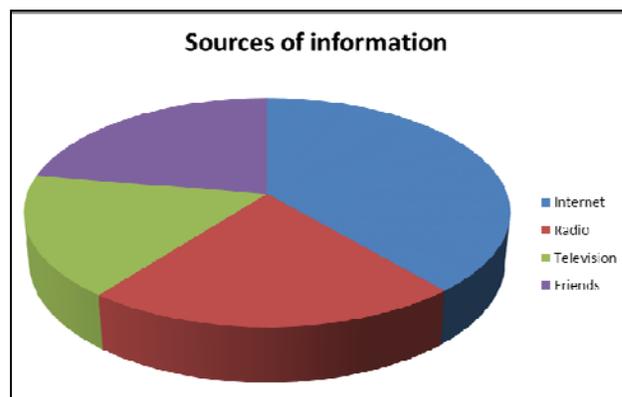

Table 3: Relationship with the level of awareness and socio-demographic variables. Socio-demographic variables

Sl. No	Independent variable	Correlation coefficient r value
1	Age	0.503**
2	Sex	0.068
3	Place of residence	0.102
4	Class / Programme	0.469**
5	Religion	0.027
6	Socio-Economic status	0.663**

**Denotes one percent significance level R2=0.64

The table 3 communicates that the there is positive and significance correlation between the age, programme/class with the level of awareness of the respondents regarding global warming. It may be due to the fact that majority of the

respondents were 21-23 years and studying in 3rd year or final year of the graduation programme. Thus, it indicated that the age and programme /class have positive bearing with the level of awareness of the respondents. Hence, the null hypothesis (H) was rejected and alternative hypothesis was accepted.

The socio-economic status (on the basis of family income) of the respondents has been observed statistically positive and significantly correlated with awareness level of the respondents. Thus the null hypothesis (Ho) was rejected and alternative hypothesis was accepted. Similar finding is also reported as

Conclusion

It is concluded that present study that all most all the UG and PG students were aware about the global warming. Their level of awareness towards the global warming was average. Education about global warming was not adequate among the respondents. To further improve their existing awareness, it is essential to conduct periodic seminar and workshop on the topic. Particularly, the respondents may learn and follow positive meanings to control the consequences of global warming.

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