

Addressing Implications of Global Warming: Impact of Plan Teaching Programat Chidambaram Town

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Abstract

Global warming is a great threatening for not only human beings also the plants, animals and at last the mother earth. Naturally occurring greenhouse gases (not fluorinated gases) are good in naturally occurring amounts; it's when people start contributing excessive amounts of them that greenhouse gases become a problem. Global warming affecting the quality of life with poor quality air results in spreading of diseases and economic loses which finally leading to decreased population. Climate change can be mitigated through the reduction of greenhouse gas emissions or the enhancement of the capacity of carbon sinks to absorb greenhouse gases from the atmosphere. This Study aimed to assess the knowledge of Chidambaram residents about global warming and intended to assess the effectiveness of Plan Teaching Program among the same. Training received by the people and after the program the attitude and knowledge improved a lot.

Key Words: *Global Warming, Climate Change, Environment, Green House Gases, Air pollution, Rainfall, Temperature, Plan Teach Method*



1. Introduction

Global warming is nothing but increase in average temperature at lower atmosphere. Almost 1° Celsius risen in the last 100 years. Global warming strongly influencing the climate change and its effects are very dangerous. Natural causes like forest fire, Permafrost, sun spots and water vapor and manmade causes like deforestation, mining, fossil fuel burning, landfills, over usage of chemical fertilizers and excess meat consumption are the reasons for global warming.

Among the various causes the human interferences is more dangerous which results excessive release of green house gases. Carbon dioxide (CO₂), Methane (CH₄), water vapor and fluorinated gas are the green house gases which acts as a greenhouse around the earth which do not allow the received sun's heat to escape from atmosphere into space.

Over contribution of green house gases results in excessive gas buildup leads to extra warm of atmosphere which causes sea level rise, sea surface temperature rise heat waves, precipitation pattern changes. TamilNadu state action plan on climate change states that average annual maximum temperature for TamilNadu could increase by 3.1°C by 2100 from the baseline of 1970-2000. Annual minimum temperature could increase by 3.5 °C. Average annual rainfall could reduce by up to 10% and the rainfall pattern could shift more towards the northeast monsoon, which could bring intense cyclones and floods. Northeast monsoon contributes 50.7%, southwest monsoon contributes 31.9%, winter and pre –monsoon rains contribute the remaining 17.4% of the rainfall of state.

Sensitizing program is an awareness program about global warming lasting for not less than 60 minutes which consists of 1) Global warming –Introduction-Global to

Local Scenario, 2)Causes of global warming and its effects,3)Green house gases and its role ,4)Methods to reduce Global Warming5)Discussions on individual contributions.

2. Objectives

- ❖ To know the level of awareness about global warming among various public groups of Chidambaram town
- ❖ To study the effect of plan teach method program at various public groups of Chidambaram town about Global Warming.

3. Methodology

Study area- Chidambaram town

This study is undertaken by questionnaire method

Universe of sample is 62153

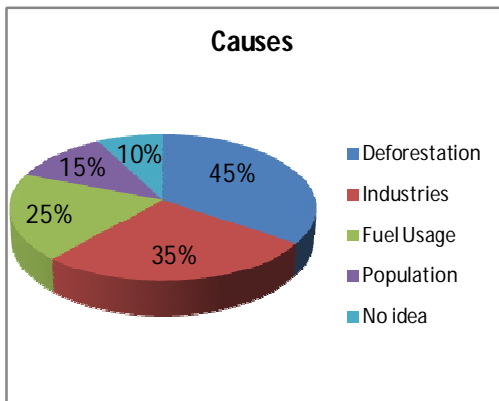
By simple random sampling methodI took 20 %(1244) of universe

Various groups (Retired person association, Sports Clubs, Rotary Club, Apartment associations, Self help Groups, Students Associations, Bulder associations, Doctors associations)from Chidambaram town took for the study irrespective of age, gender, education, profession. Pre- assessment taken from every individual followed by global warming sensitizing program by a trainer. After the programthe same respondents assessed again with a questionnaire.

4. Result and discussions

List of global warming reasons from respondents before training

- 1) Deforestation
- 2) Industries
- 3) Fuel usage
- 4) Population



45 % of respondents noted down deforestation is the main reason.

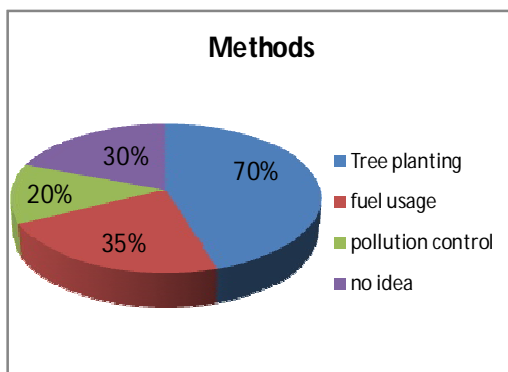
35% of respondents said that the Industries are responsible

25% of respondents said high fuel usage as a reason

15% of respondents thought high population as the reason

10% of respondents are not aware of the reasons of global warming

List of methods for reducing global warming from respondents before training



70 % of respondents suggested tree planting

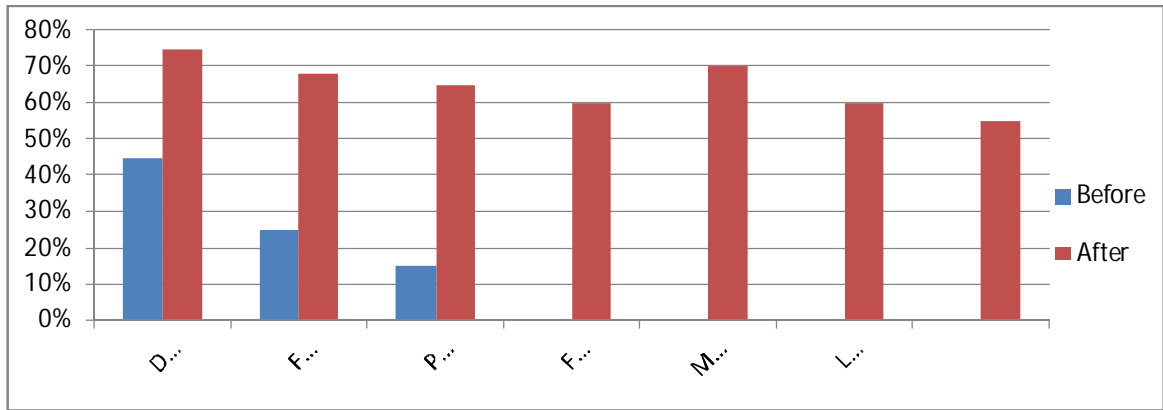
35% suggested reducing fuel usage

20 % suggested reduce/control industrial pollution

30% are not aware of any methods to reduce global warming

List of global warming reasons from respondents after training

- 1) Deforestation
- 2) Fuel Usage
- 3) Population
- 4) Chemical Fertilizers usage
- 5) Mining industries
- 6) Landfills
- 7) Meat consumption



75 % said that deforestation is the reason for global warming ,Additional 30% came to know after the program.

68% said that high fuel burn is the reason, 43% more explored fuel burning is also a cause for global warming after the program.

65% felt high population is the reason, almost 50 % rise in the awareness of population reason.

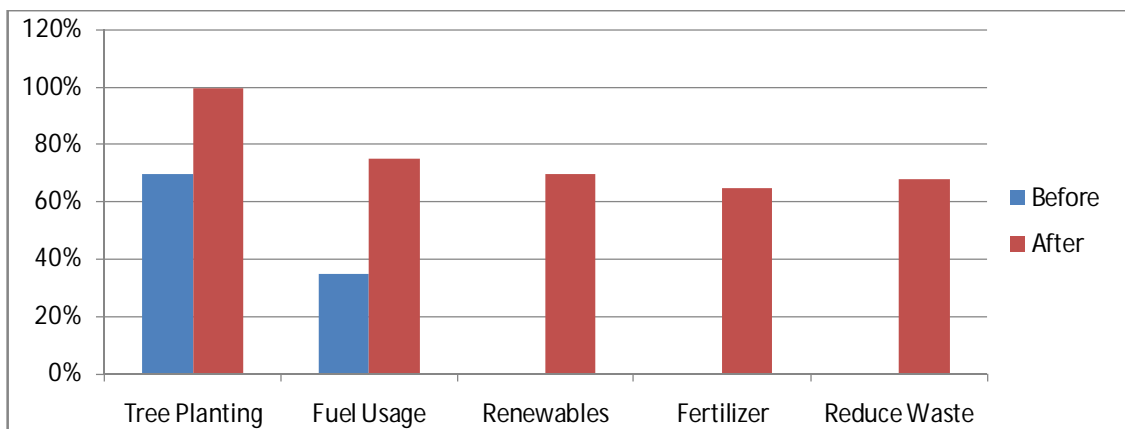
60% newly claimed the usage of fertilizers as a reason

70% first time said that mining also a reason for warming

60% newly said that the landfill as a reason

55% first time claimed high meat consumption also a reason

List of methods for reducing global warming from respondents after training



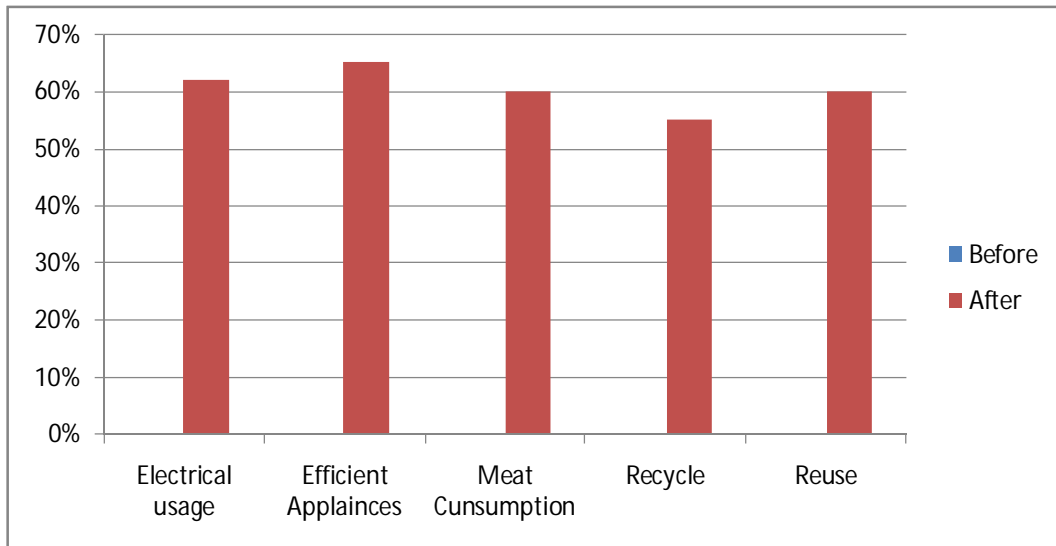
100% suggested tree planting to reduce global warming, which is 30% higher than previous response

75% Respondents suggested to drive less, efficient vehicle usage, pick vehicle pooling and to use public transportation, 40% higher after the program.

70% informed to utilize renewable energy maximum to reduce the burning of fossil fuels.

Nearly 65% newly aware the worst effects of chemical fertilizers and asked to reduce usage of fertilizers and to utilize natural fertilizers

68% of respondent came to know that proper waste management is necessary to reduce waste and landfills which had nil percentage awareness before the program



First time 62 % aware to utilize the electrical usage efficiently by changing LED bulbs, turn off the switches, plugs out after the usage, avoid day lights, changing LED monitors in system

Newly 65 % suggested using efficient home appliances to save energy which is not seen in pre assessment.

Newly 60% awareness noticed at 2 areas to decrease the meat consumption usage and reuse the used things to the possible extent.

First time 55% suggested to use recycle things maximum to minimize the global warming.

Conclusion

Even though there is a little awareness about Global Warming before the program we here noticed that there is major swing in the awareness on Causes and Methods to decrease Global Warming after the single Plan Teach Method. So the Plan teach method can be considered as an effective method to sensitize different communities and If the society get more and more such programs very soon 100 % awareness will attained. Same population can be measured after 3 months by the trainer to assess the impact for practice outcome. When individuals are ready to act, change will happen. We can curb our own contribution to climate change by becoming aware of it and spread the awareness.

References

1. Dean Edwin Abrahamson, Chapter 1-Global Warming, *The Challenge of Global Warming*, 1989, ISBN 0-933280-87-4
2. Andrew K. Jorgenson, "Global Warming and the Neglected Greenhouse Gas: A Cross-National Study of the Social Causes of Methane Emissions Intensity", 1995 - *Social Forces*, Volume 84, Issue 3, March 2006, Pages 1779–1798
3. Michael J. Ring, Daniela Lindner, Emily F. Cross, Michael E. Schlesinger. "Causes of the Global Warming Observed since the 19th Century - Atmospheric and Climate Sciences", 2012, 2, 401-415, <http://dx.doi.org/10.4236/acs.2012.24035>
4. Kornberg, H. 1990. "Science and environmental awareness". *School Science Review*, 72: 7–14.
5. P. Jones, M. New, D. E. Parker, S. Martin and I. G. Rigor, "Surface Air Temperature and Its Changes over the Past 150 Years," *Reviews of Geophysics*, Vol. 37, No. 2, 1999, pp. 173-200. <http://dx.doi.org/10.1029/1999RG900002>
6. Keith R. Stamm, Fiona Clark, Paula Reynolds Eblacas, "Mass communication and public understanding of environmental problems: the case of global warming", *Sage Journals*, Volume: 9 issue: 3, 2000, page(s): 219-237, <https://doi.org/10.1088%2F0963-6625%2F9%2F3%2F302>
7. Ibrahim Dincer, Can Ozgur Colpan, Fethi Kadioglu-Causes, "Impacts and Solutions to Global Warming", 2013, ISBN 978-1-4614-7587-3

8.RBMcKinstry Jr, Penn St. Env'tl. L. Rev., 2004, HeinOnline, "Local Solutions for Global Problems: The Debate over the Causes and Effects of Climate Change and Emerging Mitigation Strategies for States", Localities and Private parties.

9.Mark Z.Jacobson. Air Pollution and Global Warming-History, Science and Solutions, 2012 ISBN 978-1-107-02161-7

10.John, T. Hardy. "Climate Change-Causes, Effects and Solutions",2003 ISBN 100-470-85019-1

Pre Assessment

பூமிவெப்பமாககாரணங்கள்

✓

அதிகஎரிபொருள்பயன்பாடு	
காடழிப்பு	
ரசாயனஉரபயன்பாடு	
அதிகமக்கள்தொகை	
தொழிற்சாலைகள்	
சுரங்கத்தொழில்கள்	
அதிகஇறைச்சிஉணவு	
அதிககுப்பைகள்	

வெப்பமாவதைகுறைக்கும்முறைகள்

Post Assessment

பூமிவெப்பமாககாரணங்கள்

✓

அதிகளரிபொருள்பயன்பாடு	
காடழிப்பு	
ரசாயனஉரபயன்பாடு	
அதிகமக்கள்தொகை	
சுரங்கத்தொழில்கள்	
அதிகஇறைச்சிஉணவு	
அதிககுப்பைகள்	

வெப்பமாவதைகுறைக்கும்முறைகள்

✓

எரிபொருள்பயன்பாட்டை குறைத்துக்கொள்வது	
புதுப்பிக்கத்தக்க ஆற்றலை பயன்படுத்துவது	
மரம்நடுவது	
ரசாயனஉரபயன்பாட்டை குறைத்துக்கொள்வது	
இயற்கைஉரங்களை பயன்படுத்துவது	
தேவையான அளவுமின்சாரம்பயன்படுத்துவது	
திறன்வாய்ந்த வீட்டு உபகரணங்களை பயன்படுத்துவது	
இறைச்சி உண்பதை குறைத்துக்கொள்வது	
கழிவுகளை குறைத்துக்கொள்வது	
மறுசுழற்சி பொருட்களை பயன்படுத்துவது	
மறுபயன்பாட்டு பொருட்களை பயன்படுத்துவது	