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# A Study on impact of Climate Change on Farmer with Special Reference in Tirunelveli District

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**Abstract:** Climate change has been recognized the foremost environmental problem of the twenty-first century and has become a subject of considerable debate. It is predicted to lead to adverse, irreversible impacts oil earth and the ecosystem as a whole. The continuous emissiom of green house gases is responsible for the increase in earth's temperature, which results in melting of glaciers, increased precipitation, more and more extreme weather events and shifting seasons. The accelerated pace of climate change, combined with increasing global population and income growth, threatens food security everywhere, since climate is the primary determinant of agricultural productivity higher temperature reduces the yield of desirable crops while increasing the pest and weed proliferation.

Keywords: Carbon dioxide, greenhouse gas, emissions

## I. INTRODUCTION

Climate change refers to long-term shifts in temperatures and weather patterns. These shifts may be natural, such as through variations in the solar cycle. But since the 1800s, fuels blanket wrapped around the earth, trapping the sun's heat and raising temperature.

## **1.1 Statement of the Problem**

In India there is an increasing number of challenges for teachers in presenting important but complex science concepts to students. Thus weakness in our schools may lead to a significant role in the nations ability to effectively deal with contemporary climate change issues.

## 1.2 Objectives of the Study

- To understand the evidence for and against global climate change- in tirunelveli temperatures for the last 100 and 1000 years.
- To know the causes of global warming.
- To know the consequences of global climate change-social, economic, environmental and political consequences of global climate change and how they change the way we live.

## **II. RESEARCH METHODOLOGY:**

In the second section, the two most common methods in climate-conflict research are identified and discussed: large-N statistical analysis and qualitative case study.

## 2.1 Primary Data

Primary data was collected from 50 respondents through systematically prepared questionnaire and through structured interview methods.

## 2.2 Secondary Data

The main source of information for secondary data was collected from old records and the websites books, journals, newspaper etc

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#### **III. REVIEW OF LITERATURE**

**Kumar and Alex (2019)** analyzed that, "identify the research output on marine biology publications period of 1999-2017. They studied the distribution of publications was based on the year of publication, country, language and document type. Relative growth rate of the publications and doubting time was calculated".

**Sangam, Shivappa and Savitha (2019)** represented "a methodological approach focused on climate change and global warming studies as a scientometric approach. The data obtained from web of science during 2001-2016. They analysed the various objectives of the study, such as publication growth, pattern of authors, collaborating index, degree of collaborations, prominent authors. Publications increased yearly. Single author contribution decreased and collaborative study increased".

**Issac Newton and Gomathi (2018)** focused on "scientometric analysis of global warming during 2008-2010. Scientometric methods are still used to determine individual scientific indicators, promoting scientific results, choosing library journals and even determining the potential of a chosen field. Recognition for the adaptation of scientometric analysis in different disciplines and even determining the potential of a chosen field. Recognition for the adaptation of scientometric analysis in different disciplines and even determining the potential of a chosen field. Recognition for the adaptation of scientometric analysis in different disciplines".

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S.NO	AGE GROUP	NO OF RESPONDENTS	PERCENTAGE		
1	BELOW10	15	15		
2	10-20	20	20		
3	20-40	25	25		
4	ABOVE40	30	30		
	TOTAL	90	90		

#### IV. PERCENTAGE ANALYSIS Table-1

## SOURCE : Primary Data

The above table shows that , out of 85 respondents , 70 percentage of people were under the age group of below 10, 25 percentage of people were under the age group of 20,30 percentage of people were above the age group of 20,25 percentage of people were above a age group of 40 . The majority of the respondents were lie between the age of 20-40 years.

## TABLE - 2

Table showing "Farmers' perceived effect of climate change" The purpose of this analysis is to know the personal queries of selected respondents. The relevant data are presented in table -2

S.NO	VARIABLES	FREQUENCY	PERCENTAGE
1	Poor Yield	23	25.6
2	High cost of farming	15	16.7
3	Unemployment	9	10.0
4	High cost of living	24	26.7
5	Poor health	19	21.0
	TOTAL	90	100

Source : Primary Data

From the above table, we observed that out of 90 selected Respondents, 9 respondents are poor yield, 15 respondents(16.7%) high cost of farming, 19 respondents (21.0%) poor health, 23 respondents (25.6%), and 24 respondents (26.7%) high cost of living. Finally, it is found that high cost of living has more respondents than other respondents.

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#### Volume 2, Issue 1, October 2022

Ranking Table

Table - 3						
VARIABLE	NUMBER OF RESPONDENTS	RANK				
PERSONAL OBSERVATION / EXPERIENCE	35	Ι				
RADIO/TELEVISION	21	II				
EXTENSION AGENT	8	IV				
FELLOW FARMERS	13	III				
NEWSPAPERS	4	VI				
INTERNET	7	V				
NONE	2	VII				
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Sources: Field Survey 2014

Above table shows that personal observation/experience, Radio/television, and fellow farmers were the major sources of information. Chen et al., (2010) supported the significance of climate change information sharing in facilitating adaptation in China. The study also confirmed the accuracy of farmer's perceptions. These findings also concur with Isife and Ofuoku (2008), who documented that radio, has the highest audience and has the strength of reaching a large population of farmers and other rural dwellers faster than other means of communication. In Zimbabwe, however, Madobi (2012) reported that radio and television were not important sources of information on climate change because of the low credibility these sources commanded in that country.

## V. FINDINGS

- Majority of the respondents Age of above 40.
- Majority of the respondents are high cost of living.
- Majority of the respondents are PERSONAL OBSERVATION / EXPERIENCE.

## **VI. SUGGESTION**

- The above table show that the 25 percentage of people were under the age group of 20
- The above table shows that the 15 percentage of people were face by changes in climate change.
- The above table shows that the 40 percentage of people are used to prevent climate change.

## VII. CONCLUSION

In conclusion, climate change is the most significant problem facing the world. The study indicated irregular rainfall, high temperature, weather information, and high evaporation as the factors that highly influenced farmers' ability to adapt to climate change. Global warming is increasing day by day. If we cannot prevent it as soon as possible, our world will face undesirable consequence.

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