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# A STUDY ON AWARENESS AMONG CONSUMERS CONCERNING GREEN CRACKERS IN SIVAKASI

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#### Abstract

According to the National Green Tribunal (NGT)<sup>1</sup>, green crackers are permitted only in cities and towns where air quality is moderate or poor and reduction in emission of sound as well in green crackers. Indian Council of Scientific and Industrial Research (CSIR) developed green crackers which are better than previous sound-emitting crackers and other fireworks. The green crackers developed by the CSIR include flower pots, pencils, sparkles and chakkar. Green crackers are environment-friendly reducing air pollution that causes health hazards. The fireworks industry in Sivakasi has a turnover of Rs. 6,000 crores and around 8 lakhs people are employed by the industry. The Sivakasi and Virudhu nagar fireworks owners are expecting a fair share of the Chinese global firecracker market so that it would provide job opportunities to a larger number of people as even after mechanization, manpower is still a vital part of the industry. The 6000 crores fireworks industry of Sivakasi, which has turned mainly into green crackers, is now planning to tap the international firecracker industry hitherto dominated by Chinese players. The present study focuses on examining the awareness of the respondents concerning green crackers.

**Keywords:** National Green Tribunal, Crackers, Green Crackers, Fireworks, NEERI, Pollution, Diwali, Festivals. CSIR.

## INTRODUCTION

The fireworks industry in Sivakasi has a turnover of Rs. 6,000 crores and around 8 lakhs people are employed by the industry. The Sivakasi and Virudhunagar fireworks owners are expecting a fair share of the Chinese global firecracker market so that it would provide job opportunities to a larger number of people as even after mechanization, manpower is still a vital part of the industry. The 6000 crores fireworks industry of Sivakasi, which has turned mainly into green crackers, is now planning to tap the international firecracker industry hitherto dominated by Chinese players. China has a huge global footprint in the export market of fireworks with an annual turnover of Rs. 26,000 crores. In India, fireworks industry in Sivakasi has a dominant position. The green crackers developed by the CSIR include flower pots, pencils, sparkles and chakkar. Green crackers are environment-friendly assisting ways to reduce air pollution causing health hazards.

## STATEMENT OF THE PROBLEM

Air pollution is one of the most serious environmental problems confronting our day to day life. It is mainly caused by human activities like mining, construction, transportation, industry, etc. Also, some natural phenomena are also responsible like volcanic eruptions, wildfires etc.





But their occurrence is rare and mostly it causes a local effect. Firecrackers bursted during festivals are some of the other way responsible for air pollution. Firecrackers are enjoyed by most of the children in the festival. Every year, it is seen that due to crackers air pollution increases and it affects the health of the humans. So, to minimize air pollution green crackers are manufactured. The present study focuses on examining the awareness of the respondents concerning green crackers.

# SCOPE OF THE STUDY

The green crackers are produced mostly in Sivakasi and it is traded to all places of India. The present study is confined to analyze the level of awareness of the customers concerning green crackers in Sivakasi.

# **RESEARCH METHODOLOGY**

Research methodology is a blue print which shows the researcher to carry out the research in an eminent way. It indicates research design, data used – primary and secondary data, tools for data collection, sample size, sampling technique, data processing, statistical tools used, area of the study.

### **Research Design**

This is an empirical study as the study is based on the opinion given by the respondents and published sources.

#### Data Used

The study is mainly based on primary and secondary sources.

#### **Primary Data**

For obtaining the detailed facts relating to the objectives of the study, primary data were also collected from the respondents who had used green crackers.

#### **Secondary Data**

Secondary data have been collected from textbooks, journals, magazines, research proceedings and websites.

#### **Tools Used for Collection of Primary Data**

The primary data has been collected from the respondents with the help of a structured and pre tested questionnaire prepared for the purpose. Pre-testing has been done with 10 respondents.

#### **Sample Size**

The sample size is 150 respondents.

#### **Sampling Technique**

Convenience sampling technique has been applied for the selection of 150 respondents.





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### Area of the Study

The area of the study is Sivakasi.

### **Data Processing**

After completing the survey, the raw data were coded, edited and tabulated for easy processing.

#### **Tools of Analysis**

Percentage analysis has been used to analyse the primary data.

### ANALYSIS AND INTERPRETATION OF DATA

In this section, socio-economic profile of the respondents and their level of awareness concerning green crackers are studied.

#### **Socio-Economic Profile of the Respondents**

Socio-Economic profile influences the behaviour of the people to a very large extent. Here, the socio-economic variables such as gender, age, education, occupation and monthly income are taken into account.

#### Gender wise Classification of the Respondents

Table 1 shows the gender wise classification of the respondents.

Table 1	: Gender	Wise	Classification	of the	Respondents
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Gender	No. of Respondents	Percentage
Male	92	61.33
Female	58	38.67
Total	150	100.00

Source: Primary data

It is noticed from Table 1 that out of 150 respondents, 92 (61.33 per cent) are male and the remaining 58 (38.67 per cent) are female.

#### Age Wise Classification of the Respondents

Table 2 shows the age wise classification of the respondents

 Table 2: Age Wise Classification of the Respondents

Age (in Years)	No. of Respondents	Percentage
Below 30	48	32
30-40	32	21.33
40-50	36	24
50-60	19	12.66
Above 60	15	10
Total	150	100.00

Source: Primary data





It is stated in Table 3.2 that out of 150 respondents, 48 (32 per cent) belong to the age group of below 30 years, 36 (21.33 per cent) come under the age group of 40-50 years, 32 (21.33 per cent) are in the age group of 30-40 years, 19 (12.66 per cent) belong to the age group of 50-60 years and 15 (10 per cent) are in the age group of above 60 years.

### **Education Wise Classification of the Respondents**

Table 3 lists out the education wise classification of the respondents

Education	No. of Respondents	Percentage
School level	67	44.67
College level	71	47.33
Others	12	8
Total	150	100.00

#### **Table 3: Education Wise Classification of the Respondents**

Source: Primary data

Out of 150 respondents, 71 (47.33 per cent) have completed graduation in colleges, 67 (44.67 per cent) have completed their education up to school level and 12 (8 per cent) belong to others category.

#### **Occupation wise Classification of the Respondents**

Table 4 states the occupation wise classification of the respondents.

Occupation	No. of Respondents	Percentage
Business	35	23.33
Employment	67	44.67
Profession	31	20.67
Others	17	11.33
Total	150	100.00

#### **Table 4: Occupation wise Classification of the Respondents**

Source: Primary data

Out of 150 respondents, 67 (44.67 per cent) are employees, 35 (23.33 per cent) are businessmen, 31 (20.67 per cent) are professionals and 17 (11.33 per cent) are in others category (Students, Housewives, Retired people).

#### Monthly Income Wise Classification of the Respondents

Table 5 points out the monthly income wise classification of the respondents

#### **Table 5: Monthly Income Wise Classification of the Respondents**

Monthly Income (in Rs.)	No. of Respondents	Percentage
Below 15,000	46	30.67
15,000-30,000	71	47.33
Above 30,000	33	22
Total	150	100.00

Source: Primary data





Out of 150 respondents, 71 (47.33 per cent) are in the monthly income group of Rs. 15,000 - Rs. 30,000, 46 (30.67 per cent) have earned a monthly income of below Rs. 15,000 and 33 (22 per cent) belong to the monthly income group of above Rs. 30,000.

Awareness of the Customers Concerning Green Crackers

Table 6 shows the awareness of the customers concerning green crakcers.

	No. of Respondents and Score												
	Fully aware		Aware		No Opinion		Not aware		fully not aware		Score	Score	ık
	Number	Score	Number	Score	Number	Score	Number	Score	Number	Score	Total S	Mean S	Rank
Availability of green crackers	52	260	48	192	31	93	18	36	1	1	582	3.88	II
Price of green crackers	49	245	46	184	35	105	15	30	5	5	569	3.79	IV
Chemical composition of green crackers	57	285	47	188	28	84	10	20	8	8	585	3.90	Ι
Various types of green crackers	46	230	55	220	32	96	15	30	2	2	578	3.85	III
Knowledge about manufacturers/wholesalers and retailers of green crackers	37	185	50	200	45	135	10	20	8	8	548	3.65	v

Table 6: Awareness of the Customers Concerning Green Crackers

## Source: Primary Data

From the Table 6, it is found out that most of the respondents gave I rank to 'Chemical composition of green crackers' with the mean score of 3.9 followed by 'Availability of green crackers' (3.85). 'Various types of green crackers' got third rank with the mean score of 3.81. 'Price of green crackers' (3.7) and 'Knowledge about manufacturers/wholesalers and retailers of green crackers' (3.6) obtained IV and V ranks respectively.

# FINDINGS OF THE STUDY

The findings of the study are as follows

- 92 (61.33 per cent) are male
- 48 (32 per cent) belong to the age group of below 30 years
- 71 (47.33 per cent) have finished their education upto college level
- 67 (44.67 per cent) are employees
- 71 (47.33 per cent) are in the monthly income group of Rs. 15,000 Rs. 30,000
- Most of the respondents gave I rank to 'Chemical composition of green crackers' with the mean score of 3.9





# SUGGESTIONS

On the basis of findings of the study, some suggestions are given,

- 1. The manufacturers of green crackers have to advertise their company so as to increase the sales of green crackers via popular advertisement media.
- 2. Price is an important factor which influences the purchasing power of the customers. They have to charge nominal prices for green crackers.
- 3. The green crackers manufacturers have to produce many varieties of green crackers.

# CONCLUSION

Crackers always bring happiness to all groups of people. The impact of burning crackers resulted high level of pollution to environment. National as well as international agencies framed a guidelines to reduce the level of toxic level to control pollution. With green crackers becoming the norm, the industry has now gained the expertise and finesse to supply to international markets. Sivakasi has over 1000 manufacturers involved in making the NEERI-approved concoction. This is an appreciating initiative which helps to reduce the level of air and noise pollution.

#### References

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