GREEN MARKETING PRACTICES IN THoothukudi – AN INDUSTRIAL PERSPECTIVE

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ABSTRACT:
Green Marketing is a vital constituent of the holistic marketing concept. It is particularly applicable to those businesses that are directly dependent on the environment. Changes in the environment may pose a threat to the consumers and industries. Consequently a new type of marketing practice came into existence known as Green Marketing which would cause less damage to the environment. Thus Green Marketing plays an important role to promote and reinforce the idea of environmental protection and sustainable development both in the minds of the customer and the manufacturers. This has become the new mantra for marketers to satisfy the needs of consumers and earn better profits. This paper attempts to capture the initiatives taken by the industries of Thoothukudi, evaluates the challenges and strategies faced by them and their concern for Green Marketing to tackle social and environmental problem with innovative solutions.

INTRODUCTION:
The globe is facing detrimental impact because of the wrong usage of the limited resources by human and these ways of usages are not easily sustainable. The increasing environmental consciousness makes it necessary on consumer marketers not just to respond to, but to lead the way in, environmental sustainability programs. Sustainable development refers to maintaining long-term economic, social and environmental capital. It can be viewed as a pattern of resource use that aims to meet human needs while preserving the environment so that these needs can be met not only in the present, but in the indefinite future.

“Change is inevitable in any sphere of discipline and marketing is no exception.”
Realizing the importance of people’s concern for a healthy environment to live and preferring environmental friendly products and services to consume, marketers these days are trying to capitalize on the same to ensure sustainable development and using these concepts in designing their strategies. One of the key business strategies for sustainable development has taken the shape of Green Marketing. The concept of Green marketing entails certain fundamental elements. Marketing products which are environmentally safe; developing and marketing products to minimize environmental hazards; produce, promote, and package
products in a manner befitting so as to protect the environment are some characteristics of Green Marketing. The concept of Green Marketing is popular in the developed countries of the world while the concept would be of tremendous benefits to the developing nations by applying the three R’s of environmentalism; **Reduce** the amount of waste you produce, **Reuse** old items; donate to the unfortunate, repair if broken and **Recycle** as much as possible; buy recycled products to support recycling. It involves establishing a link between the business and customer; and this process entails a holistic approach since business will naturally have to integrate all its activities in line with environmental concerns. As a strategy, green marketing involves strategic options such as Green products, Green packaging, Green prices and Green communication. As a philosophy, green marketing runs parallel to the societal marketing concept and espouses the view that satisfying customers is not enough and marketers should take into account ecological interests of the society as a whole. It is a part of Corporate Social Responsibility. “Green Marketing” isn’t merely a catchphrase; it’s a marketing strategy that can help marketers to get more customers and make more money. Marketers should analyze the changing consumer attitudes while recognizing the role that companies can play in protecting the environment to ensure society’s well being.

**BACKGROUND OF THE STUDY:**

The present study is undertaken in Thoothukudi, a port city and an Industrial city in Indian state of Tamil Nadu.

**Green marketing the need of the hour in Thoothukudi:** The Tamilnadu Pollution Control Board has ranked Thoothukudi as third hot spot area in Tamilnadu due to the location of hazardous waste nature of the industries, high level of polluting industries and cluster of highly polluting industries. With the existence of public and private coal-fired thermal power plants in and around Thoothukudi, almost 4,000 megawatt of electricity are being produced. The impact of thermal emission from power plants affects the marine waters as well as the livelihood of fishermen. On a daily average, 20,096 tonnes of fly ash, 2,960 tonnes of noxious sulphur and 612 tonnes of nitrogen are being discharged. The emissions from Sterlite Copper, Dharangara Chemical Works and other major industries which manufacture activated carbons, chemicals and fertilizers also affect the city’s atmosphere. The ambient air quality of Thoothukudi does not comply with National Ambient Air Quality Standards. On the whole, Thoothukudi is being treated as a dumping ground and all industrial effluents are let into sea and atmosphere. To reduce the impact of industrial effluents on the environment it is imperative for companies to make and market themselves as environment friendly. Green Marketing is emerging as a popular promotional strategy. Hence the industries in Thoothukudi have to act with social responsibility.
PREVELANCE OF GREEN MARKETING IN THOOTHUKUDI

Green Marketing in Government Industries in Thoothukudi

Solar power plant:
Solar energy is a renewable energy which is a technological development and reduces the maintenance cost and electricity bill. Tamil Nadu Energy Development Agency (TEDA), in association with Mínda NexGenTech Ltd, a private company with an objective to promote the use of new and renewable sources of energy and energy conservation activities, has implemented the project. The pilot project is being undertaken in Thoothukudi district. It aims at providing CleanTech Renewable Energy and Rural Electrification solutions specifically to locations not connected to the power grid. Accordingly, a mini solar grid of 240 W capacity was set up in Ayyanadaipu village in Thoothukudi.

Bio plant:
The Tuticorin Corporation has embarked on a new project to convert solid and liquid waste into energy for consumption. The project was aimed at protecting the environment from pollution by treating sewage and biodegradable waste. The project was designed to produce 400 cubic metre of biogas, through which 62.5 KVA electricity could be generated. The project venue at Tharuvaikulam would be the collection point. As liquid waste management, sewage would be treated to tap non-conventional energy. A bottling plant would be set up here as a part of the project. The biogas produced under this project could be filled in the plant to cater to the needs of corporation vehicles. Around 1,20,000 litres of sewage could be collected everyday under the corporation limits. Apart from this resource, private players involved in septic tanks maintenance in households would be roped in to contribute to this project.

Green Marketing in Private Industries in Thoothukudi:

Tuticorin Hindustan Bio Plant: Tuticorin Hindustan Bio Plant Pvt Ltd has engaged and maintains Modern Nursery, Modern Greenhouse, Modern Polymer house and Own Transportation division. It is committed to produce and supply Hi-tech Crafted horticulture plants that offer highest yields to the farmers. It is a market leader with best infrastructure providing high quality products and excelling in performance with innovative and ethical business practices contributing to GREEN INDIA.

Nelsun Coir Pvt. Ltd. Nelsun coir strive hard to make a change, to make the world a better and healthier place for everyone. The company specializes in producing coir pith which is extracted from the coconut husk. Coir pith has a variety of applications and they are 100% eco friendly.

Kalpaka Chemicals: Kalpaka chemicals is a global leader in the manufacturing and processing of Activated Carbon. They lessen carbon imprint by relying on Solar Power for
their energy needs. They practice sustainable manufacturing methods. It is an environmentally conscious and responsible company and work with the concept to enrich nature. They hold ISO14001 certificate which is the international standard for environmental management.

**Ambal Kosalai:** Ambal kosalai is passionate in producing quality standard natural and hygienic dairy products, organic vegetables and heritage organic pulses. They also focus on providing vegetable, fruits, herbs and flower saplings using native seeds. They have the motto as walk with nature and to provide 100% organic products.

The other industries that were analyzed were Ramesh flowers, Wurthwood furnitures, AVM polymers, Venus electronics, Raj carbons and few small scale industries.

There are more industries that are conscious of environment and act with social responsibility. The fly ash bricks are manufactured in Thoothukudi. This greatly reduces the harmful pollutant from affecting the atmosphere. There are also many salt pans, industries that store and export sea foods, saw mills, edible oils, products made of palm are manufactured and poly bags are also manufactured which is less harmful to the environment.

**OBJECTIVES OF THE STUDY:**
To picturize the elements of Green marketing that bring in sustainable development, to study whether Green marketing practices are followed in Thoothukudi industries is effective for sustainable development, to study the awareness level of Green marketing and its practices among the industries of Thoothukudi, to study the extent of implementation of Green marketing practices among the industries in Thoothukudi and to examine the challenges faced by the industries while implementing Green marketing practices.

**RESEARCH METHODOLOGY:**
A descriptive research methodology was used for this study. A survey was administered to selected industries from Thoothukudi. Industrial perception towards Green Marketing practices were sought and analyzed through structured questionnaire. In this research Simple Random Sampling technique has been used. It is a probability sampling technique. It involves choosing a sample according to the requirement of the research done and choosing the industries on random. The sample size of this study is 60 industries from Thoothukudi. For analyzing the data from the industries, relevant statistical tools were used to fulfill the objectives of the study. Statistical package for the Social Science (SPSS) software package was used to analyze the data.
ANALYSIS AND INTERPRETATION:

The data were analyzed and interpreted by examining the persistence of Green Marketing practices among the industries of Thoothukudi using Chi-square, T-test, one way and two way ANOVA, factor analysis, percentage analysis, Likert’s scale, Garrett ranking and correlation.

Chi square test between the adoption Green Marketing and the competitive advantage enjoyed by the firm
Alternate hypothesis: There is significant relationship between the adoption of Green Marketing and the competitive advantage enjoyed by the firm.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Critical Value</th>
<th>Df</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>34.840</td>
<td>1</td>
<td>*.000</td>
</tr>
</tbody>
</table>

*Significant at 5% level

Source: Primary data

The above table shows that there is relationship between adoption of Green Marketing and the competitive advantage enjoyed by the firm. As per the acceptance of alternate hypothesis the p value (=0.000) is lesser than (0.05). Therefore it is accepted that the industries enjoying the green image will have competitive advantage.

Testing the relationship between the type of product manufactured and choosing of raw materials that produce least amount of pollution:
Alternate hypothesis: There is relationship between the type of product manufactured and choosing of raw materials that produce least amount of pollution.

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Marketing practice</td>
<td>Type of product manufactured</td>
<td>N</td>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Std. Error Mean</td>
<td>t value</td>
</tr>
<tr>
<td>Raw materials that produce least amount of pollution</td>
<td>consumable products</td>
<td>21</td>
<td>4.76</td>
<td>.436</td>
<td>.095</td>
<td>.759</td>
</tr>
<tr>
<td></td>
<td>non-consumable products</td>
<td>39</td>
<td>4.67</td>
<td>.478</td>
<td>.076</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 5% level

Source: Primary data

The above table shows that there is no statistically significant difference as the determined t value = 0.759 where p = 0.451 (p > 0.05) which indicates the rejection of alternate
hypothesis and the null hypothesis is accepted. Therefore there is no significant relationship between type of product manufactured and choosing of raw materials that produce least amount of pollution.

**Descriptive statistics for the factors that influence Green Marketing**

<table>
<thead>
<tr>
<th>Factors</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health and environmental concern</td>
<td>4.62</td>
<td>.555</td>
<td>60</td>
</tr>
<tr>
<td>Eco-buying attitude</td>
<td>4.03</td>
<td>.663</td>
<td>60</td>
</tr>
<tr>
<td>Social responsibility</td>
<td>4.02</td>
<td>.624</td>
<td>60</td>
</tr>
<tr>
<td>Eco-certification for the product</td>
<td>4.28</td>
<td>.555</td>
<td>60</td>
</tr>
<tr>
<td>Social awareness and value</td>
<td>4.07</td>
<td>.733</td>
<td>60</td>
</tr>
<tr>
<td>Green brand consciousness</td>
<td>3.62</td>
<td>.865</td>
<td>60</td>
</tr>
<tr>
<td>Green packaging</td>
<td>3.43</td>
<td>1.320</td>
<td>60</td>
</tr>
<tr>
<td>Green promotion</td>
<td>3.45</td>
<td>1.358</td>
<td>60</td>
</tr>
</tbody>
</table>

Source: Primary data

The table gives the mean scores for the factors that influence Green Marketing. The factor health and environmental concern has the highest mean score (4.62), which shows that the respondents strongly believe that the factor health and environmental concern largely influence Green Marketing.

**FINDINGS:**

The analysis of the data revealed the prevalence of Green Marketing practice in the industries of Thoothukudi. Percentage analysis method was used and it was analysed that there were awareness and acceptance of Green Marketing practice among the industries. Garett Ranking technique was used to interpret the recycling practices, the success and challenges involved in the adoption of Green Marketing practice. Correlations were used and it gave the results that the components of Green Marketing correlate positively. Through the statistical tools such as one way and two way ANOVA and t-test were used to test the proposed hypotheses and was found that there were no relationship between the type of product manufactured and adoption of Green Marketing practice. The Chi-square test gave the results that the industries of Thoothukudi adopt Green Marketing practice and enjoy competitive advantage. It also revealed that the elements of Green Marketing contribute sustainable development. The factor analysis method was used which gave the result that the factors that influence Green Marketing form a positive component. Thus the analysis and interpretation chapter in total revealed the prevalence of Green Marketing among the industries of Thoothukudi.
CONCLUSION:

The study contributes to the conclusion that the industries of Thoothukudi are aware and concerned about the greener environment. They also pay attention towards sustainable development. At the same time there are also industries that produce goods which lets out larger quantity of pollutants, such as activated carbon, copper and iron but they are mandatory goods. These industries also take steps to promote Green Marketing through other industrial activities such as recycling activities, green zone etc. to achieve sustainable development as directed by the pollution board. But this practice exists only in few industries where as in other industries it is in the infancy. Therefore it can be concluded that the industries of Thoothukudi practice Green Marketing but still it is not sufficient. They have to put more efforts to compensate the pollution emitted by the large-scale industries and save the city from degradation, through which sustainable development can be achieved.

REFERENCES: