Surveying the Combination of Green Marketing and Industrial Cluster for Overcoming Environmental Crisis of Iran

Seyed Mahdi Moniri

Young researcher club, Ardabil branch, Islamic Azad University, Ardabil, Iran.

ABSTRACT

One of the current problems of industrial and service investments in world is advent of various problems and especially environmental crisis that, from the people and environmental organizations surveillant's point of view, has caused negative differences and outcomes in the performance of industrial unit activity. In this research, we paid attention to survey the combination of green marketing with industrial cluster and then demonstrated techniques of overcoming the environmental crisis of industrial clusters and industries of country with presenting the model of green industrial clusters. Based upon questions and objectives of the research, qualitative approach is more suitable and we utilized it for selecting samples, collecting data, analyzing and concluding and answering to the research questions. The method of data collecting was limited to discussion, documents and deep interviews, and due to the method of sampling was purposeful and useful, theory saturation was utilized for defining the size of sample, and Maylez and Haberman expressed approaches for information analysis and collected data that includes three main stages for analyzing qualitative data: 1) decrease of data 2) presentation of data 3) conclusion and confirmation. In the present research, we, also, applied this approach. The gained results of three research questions that were interviewed among experts of ministry of industries and mines, small industries organization and industrial towns of Iran unit informational saturation, demonstrated that all three factors, namely, green efficiency, technology of clean production(green product), green management (environmental management), can, one to one, provide getting way to the green industrial cluster, and each of them can somehow cause decrease of environmental pollution. Generally, the research showed that these three factors with organizing the green industrial cluster can overcome and decrease the environmental crisis.

Key words: Green Marketing, Industrial Cluster, Green Industrial Cluster, Environmental Crisis, Iran.

Introduction

Maybe somebody didn't assume that marketing, one day, also in addition to benefit and sale, to be worry about consumer's health. But dynamism and increase of concern about environment and also governmental rules and increase of consumers awareness, has caused that companies pay attention to environment of consumers, namely, his/her physical and mental health and also the cleanliness of the environment. Responsibility of social environment is a vital management task and is very significant for success of any trade [11]. Environment increasingly has been changed to a vital and very important problem for all people [2]. The objective of marketing system is not maximizing consumption, right to choose more for consumers or getting the customer's satisfaction, but its purpose, is improving the quality of life to its possible level, and quality of life not only means quantity and quality of goods and services, but also means the quality of environment. This problem has been entered in all of dimensions of organizations and has influenced the marketing and has appeared the concept of green combination and also the need for producing ecological products and green commercial activities, has obliged the companies to combine environmental subjects with marketing attempts and strategies. In the past decade, root and deep changes in consumers distinction for green products along with advent of green consumers, has stimulated market mechanisms for organizations and new products that are adaptable with environment (same reference). However, survey demonstrates that high level of concerns and considerations that have been expressed by consumers, in general has not been companied with extensive behavioral changes. Regarding the pass of more three decades of centralized researches on natural environment challenges, at the moment, the quality of affairs, universally has been very worse in...
compared the time that green marketing had been begun. Scientific publications and mass media continually reports about destroying of ecosystems. Weather changes, cutting of jungle trees and speedup of destruction of natural habitats are accepted realities by majority of scientists and all of people. It is assumed that these day, any product has an especial reason, and at the moment, marketing, on the base of social and environmental consideration, has become one of the important activities of the company. From the early years of 2000s, marketing has obtained its more popularity on the base of social and environmental considerations. One of the trade areas that has devoted numerous discussion, is green marketing [4]. Energy crisis in the middle of 1970s created the primary wave of researches around environmental subjects in the 1980s. However, after 1990s, union of majority of scientists reported from worse outcomes of economical activities of human being on ecological balance of earth and survival in future. In fact, 1990s has been named the decade of environment: so the social and environmental concern has created more importance and priority in decisions for choosing the product, from aware consumers and providers point of view. Katler has predicted that numerous companies will change their way for concept of social marketing that not only their purpose is fulfilling effective needs of market, but also they want to improve being the good and suitable citizen and consumer [20]. Numerous numbers of companies follow the consistent category as an accurate and complete individual in their commercial strategies. It seems that some factors are effective in the explanation of this bias, such as the necessity of agreement with a lot number of social and environmental laws and rules, that is concern about toll and being rare of natural resources, awareness of the majority of people and stockholder from the significance of social responsibility and general changes in values and attitudes of societies about modern capitalization [18]. Atman accomplished in a study in 1992 in 16 countries, more that fifty percent of the consumers in every country expresses that were concern and interested in environment and in a research that was done in Australia in 1994, the results showed that 84 percent of people believed that they were responsible against environment. These people expressed that their behavior, that include the special behavior due to environmental problems [39]. In another study was shown that for 93 percent of people, the environmental effects of a product is significant in the time of its buy, and also in 1994 other researchers choose their products based on environmental performance [42]. In 1989, in a research that had been accomplished in the United States, the results demonstrated that 49 percent of responders have changed their buy due to environmental problems [6]. The studies of statistical department of Australia on 16 thousand people demonstrated that 75 percent of people are depressed due to environmental problems [5].

Kateb and Heslen express that green marketing reinforces governmental programs [22]. Bavey and Sil believe that social values changes, like other factors of marketing environment, with passing time. Then in order to being certain about success, market markers and their products must be changed according to the conditions of society. In 2006 the industry of green products had been estimated more than 200 billion. Kamino, in his research surveyed the effect of interest owners on green marketing strategies. The past researches demonstrates that interests play an important role on organization and markets, but a comprehensive attitude on this survey shows that there is not any relationship between interest owners and green marketing strategies. The findings of this research show the combination of interest owners to green marketing strategies and its impact on existent strategies of companies.

Another research presented a model for internal relation among green bias strategies, developing product, match of efficiency chain, green incomes and performance of commercial unit. The objective of this research is identifying inventive subjects by strategic bias, operation of internal business, match of efficiency and assessment of performance. Lee, in is research, surveyed gender differences in environmental attitude, environmental significance, understanding the environmental responsibilities in behavior of green purchase in young customers of Hong Kong. The findings showed that young women, in compared with men, have more valid in environmental attitude, environmental significance and environmental responsibility in behavior of green purchase in Hong Kong [24]. Lee, in his another research, identified important effective factors on behavior of green purchase of young customers. The findings showed that the significant factors, include respectively, effect of society, environmental importance, environmental preservation and environmental responsibility [25].

**Green Marketing:**

Unfortunately, majority of people believe that green marketing demonstrates improvement or advertisement of the products with environmental qualities. The words like: without phosphate, recoverable and agreeable with ozone layer, are the cases that majority of consumers relate them with green marketing. However, these words are just symbols of green marketing. The start of green marketing activities must be with bias to comprehensive and group movements [28]. In the past, environmentalists were just the people that were worry about finishing natural resources, fulling rubbish and pollution.

Today, environmentalists in all over the world are becoming universal in purpose and assessment of
their operation. Their purpose is increasing the awareness of people about the importance of preservation of environment in a universal assessment, and if this assessment has not been surveyed in a reasonable way, our planet will encounter so many problems. Also, universal awareness about environment through mass media reports is about ecological calamities like acid rain, ozone layer and universal heat [3].

Today, vital environmental factors are public interest and giant effect and welfare of society. in his new marketing book, explains the universal bias:
1. Interest to the cleanliness of air, soil and its resources.
2. Preservation of environment against destruction.
3. Reasonable approach in applying natural resources with emphasis on marketing (recovery).
4. Providence in application of unrenewable materials.
5. Progression in the field of using waste materials and in the field environment and having healthy life.

Definitions Of Green Marketing:

1. US marketing association in 1976: US marketing association in 1976 defines the green marketing: study of positive and negative aspects of marketing on pollution and decrease of energy resources and other resources.
2. Pride and Firel 1995: green marketing is related to developments and improving price, progression and distribution of products that don't injure the environment.
3. Pitican 1995: the process of union management that are responsible in assignment, prediction and fulfilling the needs of customers and society, is somehow profitable and, at the same time, consistent [36].
4. Estifen Gerow 1996: green marketing explains design environmental activities, improvement, price and distribution of the products that injuries the environment [15].

Important And Key Terms Of Green Marketing:

What is green efficiency?
Green efficiency is a guideline for accurate assigning of the present condition, estimation of its distance with suitable condition and presenting and performing effective suggestions for improving of this condition.

In this trend, the base of activity is on identification of situation and difficulties in the areas of water consumption, the consumption of primary materials and energy and also the voidance of wastes in a qualitative and quantitative way. Then, the industrial unit, with minimizing the rate of pollution and wastes, effectively utilizes its resources. This activity helps to industries in order to improve their environmental approach, and at the same time, increase their efficiency [30].

In summary, the reasons of investments in green efficiency include:
1. Approach is very significant and fundamental.
2. It guides production units towards the improvement of production process.
3. Economy is accomplished in rude material and energy.
4. Increases the competition through using new progressed technologies.
5. Increases limitations.
6. Decreases the risks resulting in filtration entrance and out of unit, storage and burring poisoned materials.
7. Increases staff's health and hygiene.
8. Increases the social and public position of company.
9. Increases extravagant tolls in solving the pollution control in end line.

Green Production:

Production includes entry of the primary material and their changes into final goods, through montage activities, manufacture and packaging. The management of goods is provided from significant subjects in all chain process that in the majority of its decisions, the environment tolls and potential social tolls in not considered. For example, the technique of store management of goods indeed in the time of JIT that is used in companies has environmentally disadvantages like: extra transportation, making extra force for road traffic, air pollution and wave pollution for environment. Companies, in short time, need to use the inactive maximum volume of storerooms, and they may utilize the ways for transportation armada quartering that has less congestion, redesigning of camions that carry goods, improvement of transportation, until improve their proficiency through this way. Companies, in long term, must survey again their assessment position, other members of fulfillment chain, technology and structure of distribution channel.

Green production includes factors like clean production, designing of production with considering environment, reproducing, and pure production. One of the key factors about improving efficiency of Japanese companies, in compared with western companies, in pure production, because it decreases the method of production, the time of leadership, toll of materials, taskforce, and at the same time, it improves the rate of production and quality and results in compatible improvement.

The success of pure production results in three factors:
- Minimizing the activities that have not any extra value for the company.
- Design and performance of effective systems of doing work.
- Management of human resources.

In some articles, variables of green production are surveyed that include:
- Applying rude materials that are agreeable with environment.
- Deleting the rude materials that may have negative impact on environment.
- Accuracy in the field of factors those are agreeable with environment.
- Accuracy in design so that it is agreeable with environment.
- Optimization of processes in the field of decreasing wastes.
- Using clean technologies so that they result in economy in consuming energy, water and decreasing pollutants.
- Recovery of primary materials in the stage of production.
- Using the principals of comprehensive quality management [12].

Green Management:

A set of studies and comprehensive measures, is purposeful that is accomplished in different levels of governmental systems until improve and progress the present condition of organization for getting to the condition of green government (environment preservation organization, 2004).

Environmental Management:

This system provides possibility to organizations that, through enforcement of suitable management, to be aware of environmental outcomes of their activities and continually improve environmental aspects of their affair. This system is related to discussions like skill of resources, division of responsibilities, performing environmental designs and finally certain assessment of processes and methods. This system also is related to identification of points of the production in process, presenting solutions for answering them on the base of especial timing programs, performing design, assessment of the measures that has been done, review and correcting the ways of needs of this standard in relationship of environmental problems. This system is applying in any organization that wants to perform the following cases:
- A) Performance, keeping and improving an environmental management system.
- B) Obtaining of confidence of match with environmental approach.
- C) Acceptance of this match to others.
- D) Demand of certificate and acceptance of environmental management by outside organization.
- E) Assignment of the agreement with this standard and state of it organization.

Although, the observation of these standards can be on the base of self-stating, but majority of industries due to various reasons like consideration or requirement of buyers (customers), being present in competitive markets and/or increasing the area of its approach and/or assuring local organization that is responsible against environment, are attempting to take certificate from credit companies (green identification, 2003.

Development, in one hand, is related with the increase of industry and technology, and in the other hand, with destruction of pollution. With considering industrial movement in a society, extra consumption of rude material and its numerous production of various pollutants and productions is unsuitable and un-agreeable and this trend causes that people and various interest group, to be worry about being one side in trend of development.

Industrial Cluster:

In the world before industry, we can see numerous commercial areas that have motivation for produce and trade of special goods. In these areas, a set of small scale institutions that usually have activities in an especial area- such as producing leather that is, organizing survival cluster that have been their certain quality. With entering to the industrial world, process of production is changed and new kinds of a set of modern industries have been created in frameworks like sets and industrial towns, and process of transmission passed slowly to industrial periods in developed countries, [10].

In 1960s Franswa Pro, with presenting theories about industrial area and development area, theoretically studied place concentrations of industry sector.

After that, Albert Hirshman with theory of industrial joints surveyed the discussion of early and next joints. Key discussion of the second half of the twentieth century was more about programming and politics of economical areas and especially industrial areas.

In key discussion of the end of 1980s and the beginning of 1990s, theory subjects, such as moveable skills, areas and industrial cluster, value chain of goods on the base of work dividing and also the sectors create competitive advantage and situation of clusters.

After 1980s and especially in 1990s, approach was very important in local and industrial programming, and cluster making and cluster analyses in local development that was based on technological capability.

However, the clusters were active in apparently for times, and have been in apparent in industrial groups and industrial larger groups. In 1990s
professor Porter posed another kind of attitude about analysis problems that were related to areas, that the method of placing economical institutions is surveyed with the name of cluster. The framework of cluster analysis provides new opportunity for economical studies of the areas that in it, the function and effect of every necessary element in an economical environment is easily understandable. Today, industrial cluster is considered as new words and concepts in literature of local economy and industrial economy. Progressed areas of the world such as Arizona, California, Florida, Minnesota, cities and European areas such as Northern Italy, Southern Germany, The Great Britain, Denmark, Japan and developing countries such as India and China, and also countries like Korea, Taiwan and Malaysia have all considered the development of industrial clusters based on strategies of industrial development in their own various areas.

It seems that using cluster analysis's and certain sets of concepts in developmental programming, we can respond the fundamental questions in area of local and industrial economical studies. Among the set of sciences of local studies, science of clusters is a new invention that follows and also will follow the new inventions. Approach of the industrial cluster as an effective approach in forming industrial development, is based on internal conditions of economics, and has been introduced in same countries as a successful pattern for industrial powering. Powering in industrial development has bilateral relation with export powering, so the pattern of industrial development will help to industrial capabilities and will influence the export power [10]. But the activities of these industries have not high increased value for their own areas.

Domestic studies have shown that, at the moment, the best and more suitable strategies for developing the areas of country (Iran) that is based on their increasing industrial productions and exports, is performing industrial clusters [19].

**What Is Industrial Cluster?**

1. A group of companies that have independent and strong vertical joint in an area geographically are not necessarily near each other [37].
2. The second and newer definition of Porter: cluster includes geographical concentration of organizations and companies related to each other in an especial area [33].
3. Cluster in its current concept, refers place concentration of economical activities in an especial area. So, the cluster is a set relatively bigger than economical institutions that has been situated in an especial area, and they have a certain professional background, and is apparent in cluster, inter institutional business and expertise of the institutions [1].

4. Clusters are groups of companies and organizations placed in a certain geographical area that by internal dependencies, organize an inter group relation of productions and services [20].
5. Majority of companies gathered in a geographical area include the providers of resources and rude materials, demanders of goods and services that have relation with each other. These companies usually have completer productions and/or an alike production, process and/or a resource [31].
6. Industrial cluster includes a set of alike industries that are in geographical areas, and have been organized due to especial advantages and/or social and organized investments such as skills and expertise's with economical purposes.
7. Industrial clusters usually are a group of institutions and economical and non-economical organizations that have vertical and horizontal relation with each other and also compete with each other. There is various cooperative fields among them, like joint purchases, using joint distribution networks, technological communication, joint researches, the fields of staff's training, joint education of managers, collective standard programs, joint studies of market, purchase of joint applied technologies and also using the joint work market fields such as organizing joint human capital storage.

**With Regard To Above Mentioned Definitions, We Can Present The Following Definition For An Industrial Cluster:**

An industrial cluster includes a set of commercial and non-commercial institutions centralized in a geographical place in an economical area that has communicated vertical and horizontal relations with each other and have cooperation and joint measures with each other. Internal relations of these institutions will be decreasing tolls and making easy, availability to organizations, science and production technology, sale markets and providing the customer's needs and demands.

**Main Purpose Of The Research:**

The main purpose of the research is making industrial green cluster in the way of overcoming environmental crisis of country industries.

**Secondary Objectives:**

1- Creating joint literature for developing green industrial cluster in the way of overcoming environmental crisis of country industries.
2- Making performance program for preventing and controlling environmental pollutions of
environmental crisis to an increasing level with creating industrial green clusters.

Research Questions:
1- How does the combination of green marketing and industrial cluster cause the creation of green efficiency in industrial cluster?
2- How does the combination of green marketing and industrial clusters cause the technology of cleaner production into industrial clusters?
3- How does the combination of green marketing and industrial cluster create a green management (system of environmental management) into industrial cluster?

Method And Approach Of Research:
The present research surveys the combination of green marketing and industrial cluster with presenting industrial green cluster in the way of overcoming environmental crisis of country industries. According to the research question and also on the base of a fact that researcher tries to survey the finding similarities and differences in research with the framework of references. With considering the research question, a qualitative research is used for finding comprehensive, for selecting samples, data collecting, analysis, conclusion and answering to the research question.

Research Strategies:
With regard to the passed conditions in the research, the research questions that are based on «How» there is not any control on control and behavioral events of the present accidents and real condition of events by researcher. So, the case study is the best choice for performing this research.

Method Of Collecting Information:
In this research, with regard to the subject and surveyed variables we use two data (information):
1- Secondary data that are collected from various information resources through library studies.
2- Primary data in this research, the interview is used for collecting them, in order to increase the effect of this technique in accuracy of collected data. So on the base of research questions in this study, that are produced data, the discussion of method in collecting data will be limited to documents and near interviews. Research methodology is explained clearly in the third chapter.

Statistical Society And Choosing Sample:
All of staffs and experts of organization of small industries and industrial towns of Iran, that their profession and expertise is related to the subject, organizes the statistical society of this research. Also on the base of the framework references and also increasing confidence and valid of the research, the interview has been done with all related sectors that are working in activities.

Model Of Research:
With considering the above mentioned matters, the following model is presented:

Data Analysis:
Main categories in the choice of approach in data analysis include the objective and research question, based on objective and research question, approach of analysis after data collecting, has been used in this study. Data were collected from various samples, then analysis was accomplished after that and at the end, the data was analyzed based on the framework of references. And also based on the kind of research, that is a case study, deductive approach was used in it, and the data were analyzed through the strategy of theory comparison and the method of the pattern correspondences. In this qualitative research, researcher finally has used a mental interpretation for analysis of collected data, and the method of interpretation has been stated for increasing confidence and valid in this research. Experimental collected data has been presented from Iran Ministry of Industries and Mine. Experimental data have been gained through personal interview from all expertises, skillful consultants of Iran Ministry of Industries and Mine.
Hosman, in 2008, has defined the data analysis as an arrangement process, survey, grouping, expression and state of concept and meaning of data. Marvast, in 2004, believed that the analysis of process is a process that includes research findings from controlled data. There are three stages in the process of analysis that include:

1- Data management: receiving, grouping, changing and combination of data.
2- Expressive counts: the process of identifying key dimensions includes design.
3- Independent counts (explanative): independent counts include the process of structural expression about discovered data. Mailez and Haberman, in 2004, have defined three stages of qualitative data analysis: [27].

### Table 1-4: Coding

<table>
<thead>
<tr>
<th></th>
<th>Supporting the theory, with the signal</th>
<th>Non-support of theory, with the signal</th>
<th>Relatively supports the theory, with the signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+/-</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The positive sign (+) in above table demonstrates that the theory has been supported with collected data from Ministry of Industries and Mines and organization of small industries and industrial towns of Iran. Negative sign (-) in above table shows that the theory has not been supported through collected data from Ministry of Industries and Mines and organization of small industries and industrial towns of Iran. The sign (+/-) states that the theory with collected data has relatively been supported with collected data from Ministry of Industries and Mines and organization of small industries and industrial towns of Iran. Coded data have been shown based on research theories in the following table.

<table>
<thead>
<tr>
<th>Cases of coded data for the research theories.</th>
<th>Cases of interview theories</th>
</tr>
</thead>
<tbody>
<tr>
<td>case 12 case 11 case 10 case 9 case 8 case 7 case 6 case 5 case 4 case 3 case 2 case 1</td>
<td></td>
</tr>
<tr>
<td>+ + + + + + + + + + + + + + + + + + + +</td>
<td>The combination of green marketing and industrial cluster causes the advent of efficiency into industrial cluster.</td>
</tr>
<tr>
<td>+ + + + + + + + + + + + + +</td>
<td>The combination of green marketing and industrial clusters causes the application of clean production technologies (green production) into…</td>
</tr>
<tr>
<td>+ + + + + + + + + + + + +</td>
<td>The combination of green marketing and industrial clusters causes the advent of an environmental management (green management) in…</td>
</tr>
</tbody>
</table>

**Green Efficiency:**

Another significant cases posed from interviewed people in the way of the theory, all 12 cases were agree with this process, that using green marketing into industrial clusters causes green efficiency in industrial cluster and it creates a green industrial cluster that overcomes environmental crisis of country (Iran). Except the first case that is believed by combination of green marketing and industrial clusters, it causes the advent of a turn period of short term investment and also it causes a green efficiency and it creates a green industrial cluster. Except the first case, the rest of 11 cases refer to this point that using the green marketing and industrial cluster due to cooperation and communications into industrial cluster causes green efficiency and it creates a green industrial cluster in the way of overcoming environmental crisis.

Decreased data has been shown in table 3-4. The sign (✓) means that the case has been stated by the interviewed persons, and sign (x) means that the case has not been stated by interviewed persons.
Presentation of collected data related to the first question.

<table>
<thead>
<tr>
<th>Case</th>
<th>12</th>
<th>11</th>
<th>10</th>
<th>9</th>
<th>8</th>
<th>7</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>Cases of interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>×</td>
<td></td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td></td>
<td></td>
<td>Turn period of short time investment</td>
</tr>
<tr>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td>Decrease of environmental pollution (social)</td>
</tr>
<tr>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Decrease of consumption of energy resources and rude materials</td>
</tr>
<tr>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>Creating competitive advantage (economical)</td>
</tr>
<tr>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Cooperation and communications</td>
</tr>
<tr>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Recovery and decrease of wastes</td>
</tr>
</tbody>
</table>

**Technology Of Clean Production (Green Production):**

According to collected data through interview, using the green marketing and industrial cluster of clean product technology is entered into industrial cluster, and an industrial cluster is created in the way of overcoming environmental crisis. All of cases believed that the combination of green marketing and industrial cluster, with applying technology of clean production (green production) causes that industrial cluster, green productions to be produced with less environmental pollution and it creates a green industrial cluster. Except the cases of 3, 4 and 7, the rest cases believed that by combination of green marketing and industrial cluster, technology of clean production (green production) is placed through cooperative network into industrial cluster and it causes the advent of a green industrial cluster. Except the cases 2, 3, 4, 6, 12, the cases 1, 5, 7, 8, 9, 10, 11, stated that the combination of green marketing and industrial clusters is supported by applying green production, and provides the way for advent of green industrial cluster. Table 4-4 demonstrates the collection of decreased data and combination of green marketing and industrial clusters through applying technology of clean production (green production) and presenting green industrial cluster in the way of environmental crisis. The sign (✓) shows that referred case has been stated by interviewed persons, and the sign (×) demonstrates that referred case has not been stated by interviewed persons.

Presentation of collected data related to the question of green production (technology of clean production).

<table>
<thead>
<tr>
<th>Case</th>
<th>12</th>
<th>11</th>
<th>10</th>
<th>9</th>
<th>8</th>
<th>7</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>Cases of interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Decrease of environmental pollution</td>
</tr>
<tr>
<td>×</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Increase of the quality of production</td>
</tr>
<tr>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Economical interests (decrease of toll, increase of profit)</td>
</tr>
<tr>
<td>✓</td>
<td>×</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Attraction of more green consumers</td>
</tr>
<tr>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Producing green production (minimum environmental pollution)</td>
</tr>
<tr>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Cooperative network for placing technology in cluster</td>
</tr>
<tr>
<td>×</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Supporting the support organizations</td>
</tr>
</tbody>
</table>

**Green Management (Environmental Management System):**

As mentioned in table 4-2, collected data from interviewed persons showed that all of cases were agree by combination of green marketing and industrial clusters, green management, and (environmental management system) has been created into clusters and it causes formation of a green industrial cluster that is in the way of overcoming environmental crisis. Collected data for this question demonstrated that cases of 1, 2, 3, 5, 8, 12 believed that the environmental management has been created through the combination of green marketing and industrial cluster, and it causes consistent development of industrial cluster in the way of overcoming environmental crisis. All of cases, except the case 3 believed that the combination of green marketing and industrial clusters creates the environmental management and the decrease of tolls and increase of profit causes formation of green industrial cluster in the way of environmental crisis of country (Iran).

All of cases believed that the green management causes that the decrease of environmental pollution of green industrial cluster to be advent in the way of
environmental crisis. Except the cases of 11, the rest of interviewed persons believed that with combination of green marketing and industrial cluster, the industrial management is created with the green management, and it causes the access to the industrial cluster with environmental standards, and an industrial cluster is created through that. Except the cases of 8,12, rest of the cases believed that by combination of green marketing and industrial cluster, the environmental management (green management) is accomplished due to local concentration and group cooperation's into the cluster and it provides this possibility. It creates a green industrial cluster through this way. The cases 2, 6, 7, 8, 9, 10, 11 referred this point that by combination of green marketing and industrial cluster, it considers environmental management and environmental control.

The table 4-5 demonstrates the collected data of any persons and their environmental effect (green management) on green marketing combination and industrial cluster and the formation of green industrial cluster in the way of overcoming environmental crisis. Sign (✓) means that it has been stated by the interviewed persons, and the sign (x) means that it has not been stated by the interviewed persons.

<table>
<thead>
<tr>
<th>Presentation of collected data from green management (environmental management system).</th>
<th>Cases of interview</th>
<th>Green management</th>
</tr>
</thead>
<tbody>
<tr>
<td>case 12</td>
<td>case 11</td>
<td>case 10</td>
</tr>
<tr>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>✓</td>
<td>x</td>
<td>✓</td>
</tr>
<tr>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Conclusion And Suggestions:**

The results of the research will present a connotative concept of the research. However, suggestions will be offered for the future research.

**The Findings Of The Research Questions:**

How does the combination of green marketing and industrial clusters cause the industrial cluster reach green efficiency?

In general, green efficiency with all mentioned advantages about it by interviewed persons, provides the field for green industrial cluster and causes the decrease in environmental crisis.

How does the green marketing combination and industrial clusters cause to use industrial cluster of clean production technology (green production) into the cluster?

Collected data from ministry of industrial and mines, organization of small industries and industrial towns of Iran, causes the combination of green marketing and industrial cluster of green cluster (clean production technology) into industrial cluster, and also it can be supported by green support organizations. In general, with all advantages of this technology of clean production creates through combination into industrial cluster, it created a suitable field for organizing green industrial cluster in the way of overcoming environmental crisis of country (Iran).

How does the combination of green marketing and industrial cluster cause the advent of environmental management (green management) in industrial cluster?

Collected data of ministry of industries and mines, organization of small industries and industrial towns, creates the combination of green marketing and industrial cluster of an environmental management (green management) into the industrial cluster and it provides the field through formation of a green industrial cluster. According to collected data from ministry of industries and mines, organization of small industries and industrial towns of Iran, environmental management (green management) with advent into the industrial cluster decreases various tolls into industrial cluster and increases the profits, decreases environmental pollution into industrial cluster. Surveillance and environmental control is accomplished for industrial cluster, and in general environmental management will be very significant in country (Iran).

**General Conclusion:**

With regard to the main objective of research, is the combination and green marketing and industrial cluster with presenting green industrial cluster in the way overcoming environmental crisis of country, and follows purposes like creating joint background in the field of development in green industrial cluster in the way of overcoming environmental crisis of country, decreasing the level of environmental crisis to acceptable level with creating green industrial cluster, improving to the optimization and using
resources and energy and investments for decreasing or overcoming environmental pollution.

In general, when they are formed like a system, namely, green industrial cluster, they can decrease any environmental crisis and can overcome them.

Suggestions:

With respect to the results of researches, researchers assume it necessary to present suggestions about research.

The suggestions of the researcher is that the responsible persons of industries and environment of country in their effective programs must consider the way to reach the green industry and also use, in research, non-industrial pollutants for greening the other industries. With regard to the air pollution and environmental crisis of country is increasing day by day of industries, it is better to use the three factors, according to every industry, for controlling the crisis. Along with this important suggestion, in my opinion, it is better that with identification and development of industrial clusters in country, strategies and resulted techniques in this research is applied in these newborn clusters, and in fact they can develop a green industrial cluster that include not only industrial cluster and develops in it, but also observes all details and environmental directions in itself. This point is considered by the industrial cluster that scientifically from 2005 in country and responsible persons don't pay attention to organization of small industries and industrial towns and also they don't notice environmental crisis of industrial clusters in the future. I suggest about the first factor that all industries and producers have paid attention to green marketing and use efficiency that is gained by greening. About the second factor, namely, using technology of clean production, the researcher's suggestion is that, because industrial cluster can easily, through cooperation, organize a green purchase network. Then industrial clusters of country (Iran), through this advantage, can enter the green marketing strategy: A stakeholder perspective, European journal of marketing, 41(11/12): 1328-1358.

References


