

AN INITIAL LEVEL STUDY ON GREEN ECONOMY AND SUSTAINABLE DEVELOPMENT AWARENESS AMONG MANAGEMENT STUDENTS (WITH SPECIAL REFERENCE TO FUTURE GENERATIONS)  **Dr. Meera Hirapurkar***

ABSTRACT

The perception of a sustainable society is a radical one, and for that reason, the ideas presented in this paper are arguably novel. We have become contented with the notion of sustainability in recent years, but it is a concept that requires to be managed, planned and administered, and will also require major institutional and cultural changes in order to achieve it. The major ideas set forth in this paper attempt to rectify this complacency and visualize a new revolutionary approach utilizing the principles within the multidisciplinary field of green economics in order to achieve sustainability. This paper proposes pragmatic solutions for the incorporation of humanitarian and environmental considerations beyond traditional economic mechanisms. These green economic alternatives are very much essential to achieve the significant institutional and cultural changes which are necessary in order to attain a sustainable society.

Keywords : Sustainability; human development; institutional change; cultural changes; green economics, sustainable society, grassroots changes.

1. INTRODUCTION -

When we are talking about the term 'Development', in terms of Green economy, it should be sustainable and it has to be comprehensive. 'Development' is much more than economic growth. Development has to successfully balance economic goals with environmental and social goals. Not only economists and development experts, but also ordinary people including youth/ students should be prepared to participate on the most pressing issues of sustainable development.

It is now widely recognized that education is characterized as a future facing activity Sustainability for now has become a crucial aspect of social and economic development and environmental development as well. That is why related concepts and theories of Green economy and sustainable development deserve a huge and detailed dissemination, especially (for under and post graduate students) in terms of education.

The study of green economy can be taken as a part of management studies, just because in financial aspects

of management studies we talk about economy and economic growth- economic growth and societal development goes hand in hand, both are equal. The societal issues like corporate social responsibility, business ethics and values have also been discussed and moreover environmental issues have also been considered in aspects of different laws like- Environment Protection Act 1986.

The development which is environmentally and socially bearable, environmentally and economically viable and socially and economically equitable will be called as the "sustainable development" which is possible by the concept of green economy. When all these 3 aspects are included in management studies, then why not the sustainable part of it- green economy?

2. IMPORTANCE OF THE STUDY-

The future authorization to operate any management education institution will depend on its contribution first and foremost to the world achieving environmental sustainability and social justice. This

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means policy frameworks for management education throughout the world which will transform business education organizations to become custodians of the future of sustainable corporations and a sustainable business system on behalf of society.

A fundamental re-structuring of business- and management education in order to create globally responsible leaders equipped with required competences to embrace emerging environmental, societal and economic challenges. Such leaders will be needed in business, in government, and in all other areas.

3. THE NEED OF GREEN ECONOMY-

The economic crisis is at the front of everyone's mind. With unemployment and uncertainty skyrocketing, banks and financial institutions failing, and the government scrambling to pick up the pieces, it can be easy to overlook the escalating environmental crisis. We need a new way to do things. Saving the environment does not mean pitting trees against people. It is, in fact, an opportunity for innovation, entrepreneurship, and economic opportunity.

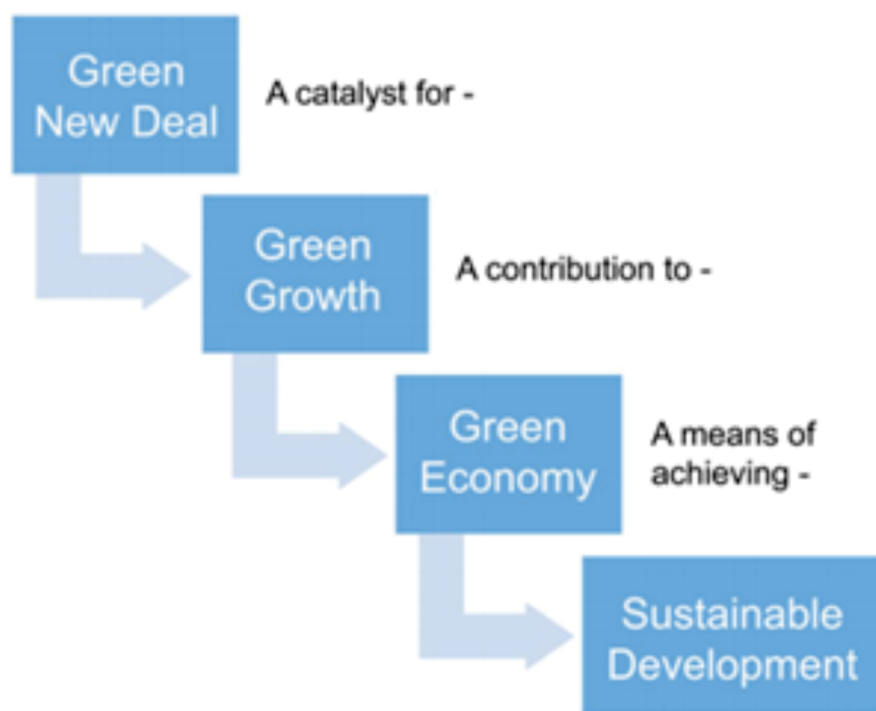
This study has raised the clear question of whether there is a need of Green economy as a course in curricula

of Management Education. Again if it is studied as part of management education, it will be widely spread and application of it will be quite easy.

4. OBJECTIVES OF THE STUDY-

The objective of this study is to evaluate the ground-breaking concept of green economy with respect to changing global scenario. The main purpose is the implication of this novel concept as a subject of management education.

1. The fundamental objective of the present dissertation is to study the wide spectrum of the green economy.
2. To relate green economy as a part of management education.
3. To find out its worthiness with the psychology of management graduates.
4. To study the feasibility of the green economy to the society.
5. To make cost-benefit analysis.
6. To verify the adaptability of the concept of green economy to the corporate of which management graduates are going to be part.



The hierarchy of Green Economy concept

5. HYPOTHESIS :

Hypothesis 1 (H₀₁): There is no significant difference in awareness level of management students related to Green Products in different cities.

Education for sustainable development is -

- Working with students and guiding them to relate their area of study and learning to the realities of their own specialization and also to their personal life by encouraging them to develop in that specific manner.
- It is a process of learning how to make decisions that considers the long term future of the economy, ecology and equitable development of all communities.
- A commitment towards environmental stewardship.
- The interaction between issues of social justice, ethics, well-being and economic & ecological factors.
- a future facing outlook and learning to think about the consequences of actions and how societies outlook can be improved in order to ensure sustainable future for all.

6. DATA ANALYSIS AND INTERPRETATION

Data analysis is the process of evaluating data using analytical and logical reasoning to examine each component of the data provided. This form of analysis is just one of the many steps that must be completed when conducting a research experiment. Data from various sources is gathered, reviewed, and then analyzed to form some sort of finding or conclusion.

The collected primary data was interpreted on the pre-defined parameters. Students' awareness checked at the ordinal or continuous level (i.e., interval or ratio) with very low as least awareness and very high as highest awareness. Then after their motive behind using green products checked with 5 concrete options. Their level of knowledge checked on three parameters- Yes, No and neutral. What efforts students are taking towards green economy is also checked by forming a set of few questions in form of Statement having answers on ordinal scale as Never, Rarely, often, sometimes and always. The above parameters are presented in a tabular and graphical

form for easy interpretation.

In order to study the awareness level of students, four cities of Maharashtra state have been selected. Mumbai, Pune, Aurangabad and Nanded these four cities have been selected for research purpose. The above mentioned four cities were purposely selected, as researcher wants to investigate regional impact on awareness of management students. This classification can be elaborated as below-

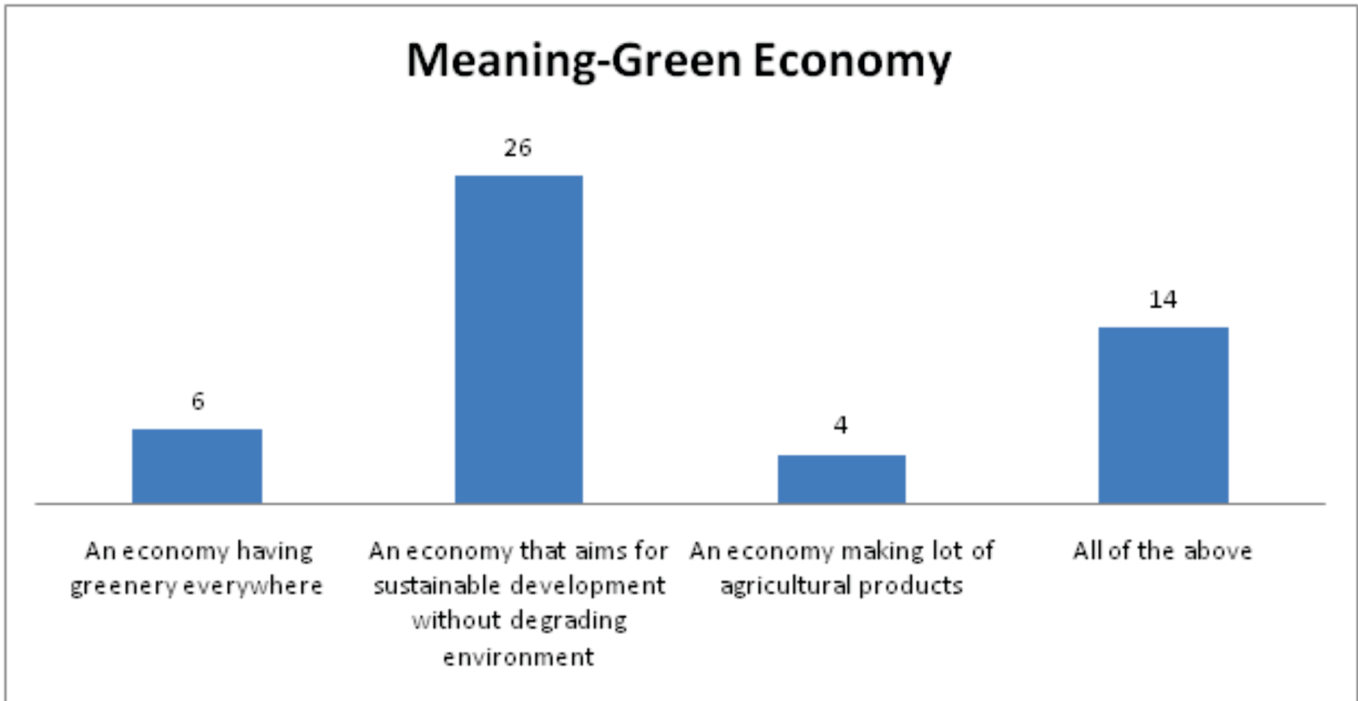
Name of City	Region	Sample size
Nanded	Rural	11
Aurangabad	Semi-urban	13
Pune	Urban	13
Mumbai	Urban	13

Table 6.1: Regional Bifurcation of Research Area
6.1 ANALYSIS OF QUESTIONNAIRE & RESPONSES RECEIVED-
FIRST LAYER- TO CHECK AWARENESS ABOUT THE CONCEPT

Q1. As per your understanding, what is Green Economy?

Elaboration - This question has been asked just to know the ground level clarity of the management students before asking them about some relevant questions regarding green economy. The objective is to check whether management students are familiar with the concept or not, to check whether they heard about word 'Green Economy' or not, to check very basic level awareness- meaning of the concept. The responses from the management students received are as under-

Statement about Green Economy	No. of Students Answered
An economy having greenery everywhere	6
An economy that aims for sustainable development without degrading environment	26
An economy making lot of agricultural products	4
All of the above	14
Grand Total	50



From the above graph it can be clearly seen that majority of the management students- 51% were aware about the basic meaning of Green economy. For sure, higher education institutions can extend their efforts to make them understand the concept to achieve the ultimate objective- shift to green economy.

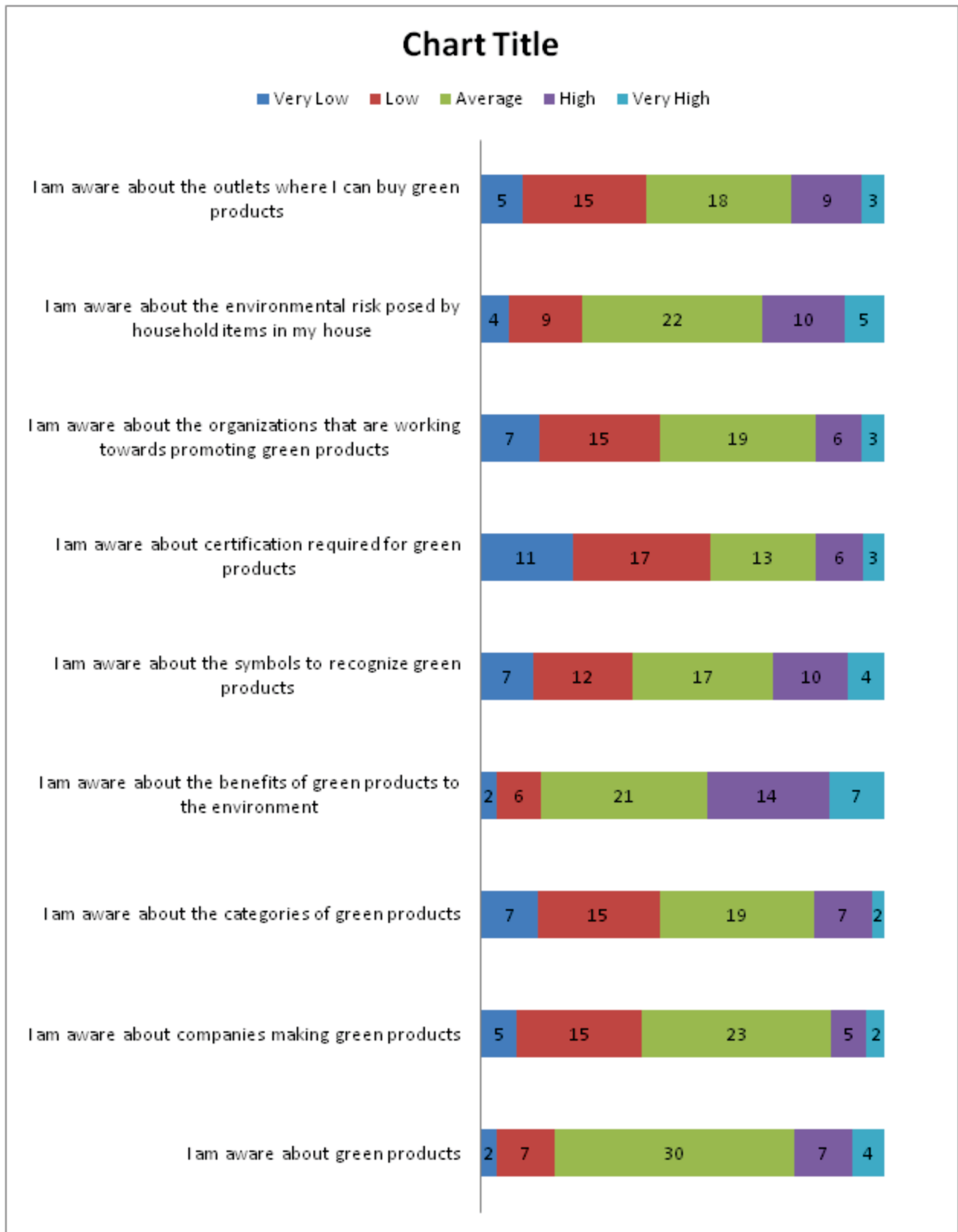
Q.2. Describe your level of awareness to following aspects of Green Economy/Green Products.

Elaboration - If management students are familiar with

the concept, their level of awareness need to be checked for further analysis. With that purpose few questions have been framed in form of Statements and responses are checked on ordinal scale parameters from very low to very high. In these questions attempt was made to know their knowledge of green products and their environmental concern and related information. Responses received are-

	Very Low	Low	Average	High	Very High	Grand Total
I am aware about green products	2	7	30	7	4	50
I am aware about companies making green products	5	15	23	5	2	50
I am aware about the categories of green products	7	15	19	7	2	50
I am aware about the benefits of green products to the environment	2	6	21	14	7	50
I am aware about the symbols to recognize green products	7	12	17	10	4	50
I am aware about certification required for green products	11	17	13	6	3	50
I am aware about the organizations that are working towards promoting green products	7	15	19	6	3	50
I am aware about the environmental risk posed by household items in my house	4	9	22	10	5	50
I am aware about the outlets where I can buy green products	5	15	18	9	3	50

Graphical Representation of the above Table -

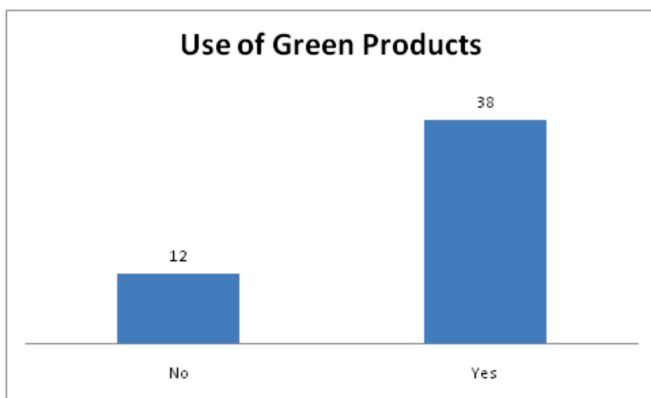


Q.3. Do you use green products?

Elaboration - This question had been drafted to know management students' awareness about green products. To know, what exactly 'Green' means to them. Is it only planting or saving a tree? saving electricity? Or something beyond that? A green product is one of the ways to move towards Green economy. So industries need to invest in and produce green products.

Use of Green Products	No of Students
No	12
Yes	38
Grand Total	50

Graphical representation of the above table -

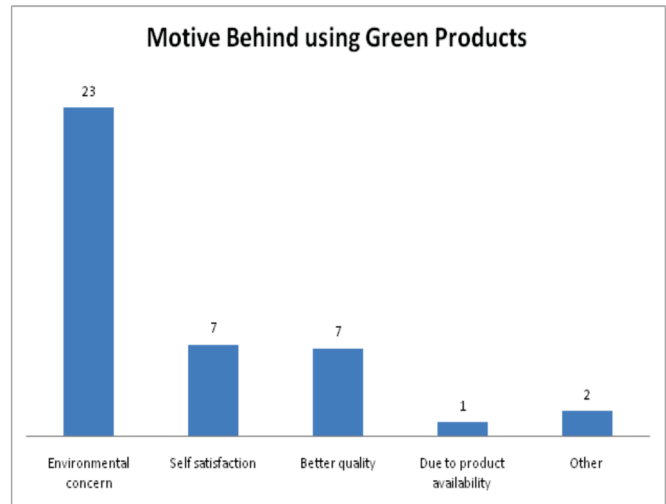


4. If yes, then what is your motive behind using green products?

Elaboration - If students are using green products, what are their motives behind using it, is examined with following options. Some students were using the green products and some were not using it. Those who were using it, their motives are mentioned in below table-

Motive	No. of Students
Environmental concern	23
Self satisfaction	7
Better quality	7
Due to product availability	1
Other	2
Total	50

Graphical representation of the above table -



- Test Applied- Kruskal Wallis H Test
- Dependent variable- awareness level of management students.
- Independent Variable- City
- Kruskal Wallis H test was run to check whether awareness level of students among various cities differs or not. There were 4 assumptions that were required to be fulfilled before running the test.
- **Assumption 1:** Dependent variable should be measured at the ordinal or continuous level (i.e., interval or ratio).
In this case dependent variable is the awareness level of students which is of ordinal in nature with very low as least awareness and very high as highest awareness.
- **Assumptions 2:** Independent variable should consist of two or more categorical, independent groups.
Typically, a Kruskal-Wallis H test is used when we have three or more categorical, independent groups. Therefore in this case, independent variable is city (having 4 categories) which is of categorical in nature.
- **Assumption 3:** There should be independence of observations which means that there is no relationship between the observations in each group or between the groups themselves. In this hypothesis, there is no student who is resident of more than one city hence there is independence of observations.

The test gave following results.

Ranks			
Name of City		N	Mean Rank
Level of Awareness	Mumbai	11	24.13
	Pune	13	25.28
	Aurangabad	13	27.29
	Nanded	13	23.03
Total		50	

It can be observed from above table that mean ranks of awareness of respondents from various cities were close to each other. They do not seem to differ significantly; however, we further checked whether the difference is statistically significant. Following test statistic result clarifies the point.

Test Statistics ^{a,b}

	Level of Awareness
Chi-Square	5.575
df	3
Asymp. Sig.	.134

a. Kruskal Wallis Test

b. Grouping Variable: Name of City

Interpretation :

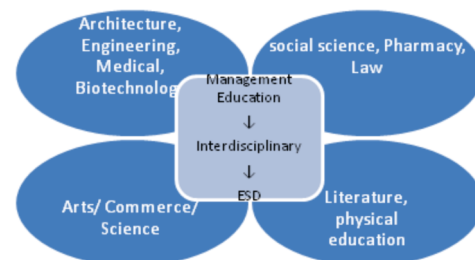
A Kruskal-Wallis H test showed that there was no statistically significant difference in awareness level between respondents from different cities, $X^2(3) = 5.575$, $p = 0.134$, with a mean rank awareness score of 24.13 for Mumbai, 205.28 for Pune, 27.29 for Aurangabad and 23.03 for Nanded. The table shows significance value above 0.05 therefore we accept the Null Hypothesis and conclude that green economy awareness level among respondents of various cities is equal. Though students belong to different cities, there is not any significant difference in their awareness level.

7. CONCLUSION -

Most of the concepts allied to green economy and sustainability are little complex to transmit to a class. One major reason, among a huge number, is the fact that these issues are new to most students, which makes the learning process slow and difficult. The themes and concepts of

sustainability are even more difficult to apply to such educational process, especially if proposed to different traditions and cultures. Hence, the present study has been dedicated to the acquisition of some information about how different student groups react to the inclusion of sustainability and green economy issues within their curriculum and how such reactions are related to some of their learning preferences and self-efficacy level.

Now we are adding a new factor to management's information overload, called as the physical dimensions of sustainability. Organizations must understand their use of natural resources, their production of waste, and the impact of their product and its waste stream on the biosphere. This is a central issue for many organizations. Management is no longer simply human resource, finance, operations, strategy and marketing. In a planet growing to ten billion people, with global GDP rising, we must learn how to manage and maintain a high throughput economy that does not destroy the planet's ability to sustain life -- especially our own. More and more students are coming into our colleges with an intuitive and profound understanding of the changing nature of the planet. They know that these challenges are not going to be wished away and will soon belong to them.



8. References :

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