

**AWARENESS LEVEL OF RURAL SOCIETY ON GREEN TECHNOLOGY WITH
REFERENCE TO HOSAKOTA TALUK, KARNATAKA
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ABSTRACT

Green Technology aims at protecting the environment and conservation of natural resources. Over the last two decades, escalating issues such as excessive pesticide use, energy over-exploitation, and the resultant greenhouse effect have led to disrupted habitats and global warming. In response to these challenges, green technology has emerged as a critical solution, with a particular emphasis on green energy as a savior when natural resources become scarce. The aim of this study is to evaluate the level of awareness among rural people on the green technology. Notably, environmental technology influences diverse areas, including alternative energy sources, biodegradable materials, recycling, and the construction of sustainable buildings. Its significant contributions extend to carbon reduction, global warming mitigation, and the preservation of precious natural resources. The shift towards green technology is anticipated to play a crucial role in stabilizing global movements aimed at enhancing human well-being and social prosperity. Hence the present study focuses on examining the awareness level of rural society on green technology.

Key Terms: Green Technology, Awareness, Rural people, Environmental Sustainability.

INTRODUCTION

Green technology is defined as the development and application of products, equipment, and systems aimed at conserving the environment and natural resources. The primary purpose is to minimize the negative impact of human activities on the environment. It aligns with the main agenda of governments worldwide, which prioritize environmental issues, particularly global warming and climate change. Green technology is positioned as the best approach to address both environmental concerns and foster economic growth. The central focus within the Green Technology sector is on providing education and fostering public awareness regarding the adoption of green technology. The objective is to encourage the widespread utilization of green technology, extending this awareness not only to urban residents but also emphasizing its importance in rural peoples. Hence, it is vital to examine the awareness levels within rural population.

LITERATURE REVIEW

Many countries worldwide demonstrate a heightened awareness of environmental conservation issues, especially in developed nations where the focus is on finding more efficient alternatives to combat global warming. A widely embraced solution in these advanced economies is the integration of green technology across various societal domains. Green technology stands out as an environmentally friendly technological solution, characterized by its lower energy consumption

when compared to alternative technologies [1] Employing green technology not only helps curb reliance on conventional fuels and electricity but also contributes to the conservation of non-renewable energy and natural resources. The continuous depletion of non-renewable resources, if unabated, could result in their exhaustion, with replacements requiring substantial time. Furthermore, the adoption of green technology has the potential to yield enhanced economic returns for a country. [2, 3, 4]. Raising environmental awareness in society does not automatically translate to a willingness to actively contribute to environmental conservation. This discrepancy is particularly pronounced in developing countries, where the overall level of awareness remains relatively low.[5]. The most substantial alterations in the phenomena of global warming, climate change, and various natural disasters have arisen from human activities such as development, industry, agriculture, forestry, and other human-induced interventions. [5].

OBJECTIVE

- 1.To analyze the level of awareness among Rural Society on Green Technology
- 2.To examine level of knowledge and attitude towards Green Technology
- 3.To understand relationship between awareness among rural society and Green Technology.

RESEARCH METHODOLOGY

The purpose of survey study through quantitative approach is to analyze awareness level of rural people on green technology. This is descriptive research design. A total of 182 out of 204 households of Hosakota Taluk villages like Bellahalli, Sathanur, Kannur, Billamaranahalli, Bagalur were selected as respondents using a purposive sampling method in December 2023. However, only 162 questionnaires have been returned with proper data.

Questionnaires were divided into four sections. The first section is demographical details. While the second section relates to the awareness about use of green technology. The third and fourth section measures the level of Knowledge and Attitude of respondents on green technology. The reliability value obtained for this part is 0.894 is excellent. Data has been analyzed using 'Statistical Package for the Social Science for Windows' (SPSS for Windows). Descriptive statistics are used to determine frequency, percentage and mean. Inference statistics Pearson Correlation test is used to determine the relationship between the level of awareness on green technology.

RESULTS AND DISSUCTIONS

Table 1 shows the respondents background information. Respondents of this study consisted of 89 males and 73 females. About 39.51% of respondents are age 41 to 50 years. Education level shows that 41.36% of respondents have passed 12th standard. About 27.78 % of respondent are farmers. Most of respondent monthly income lies between Rs 10000 to Rs 20000/-

Table 1: Respondent background information (n = 162)

Variable	Frequency	Percentage
Gender		
Male	89	54.94
Female	73	45.06

Age		
20 - 30 years old	28	17.28
31 - 40 years old	37	22.84
41 - 50 years old	64	39.51
51 and Above	33	20.37
Education		
less than 10 th	19	11.73
10 th	54	33.33
12 th	67	41.36
Graduation	22	13.58
Occupation		
Public worker	19	11.73
Private worker	28	17.28
Farmer	45	27.78
Small Business	37	22.84
Services/ Self working	26	16.05
Retired	7	4.32
Monthly Income		
less than Rs 10000	17	10.49
Rs 10000 to 20000/-	53	32.72
Rs 20000 to 30000/-	48	29.63
Above Rs 30000/-	31	19.14

Figure 1 shows distribution of respondents according to the awareness on

technology. A total of 52 % of respondents are uncertain whether they have or do not have awareness on green technology. While 32% of respondents have awareness on green technology and the remaining 16% of respondents did not have the awareness on green technology.

the respondents level of green

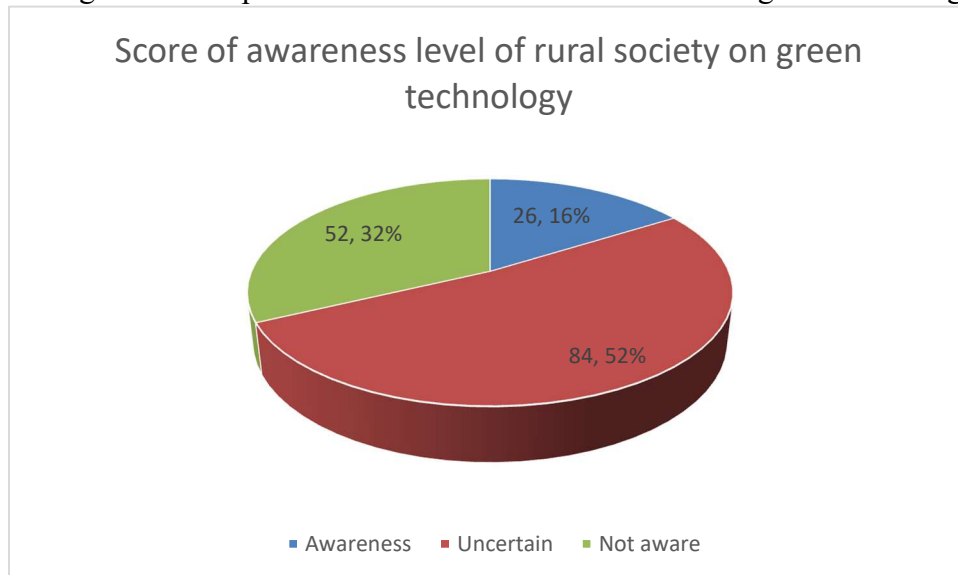


Figure 1: Score of awareness level of rural society on green technology

Level of Knowledge of Rural Societies

Table 2: Level of Knowledge of Rural Societies on Green Technology

	Items	Mean	Level
1	I know the importance of green technology to the environment.	3.32	Moderate
2	I know the green technology can guarantee a healthy and good environment	3.51	Moderate
3	I know that green technology can reduce Greenhouse Gas emission (GRH)	2.6	Low
4	I know that using green technology can save energy and non-renewable natural resources	2.7	Low
5	I know the types of green technology products or equipment	2.6	Low
6	I know the implementation of the green technology campaign that has been introduced by the government	2.33	Low
7	I know the green technology will have a positive impact on future generations	3.17	Moderate
8	I know green technology can promote renewable energy use.	3.05	Moderate

Table 2 shows the analysis of the study on the level of respondents' knowledge on the use of green technology. The result indicated that their knowledge on green technology was low with respect to greenhouse emission, nonrenewable resources, product and Government schemes.

Based on Table 3 cross tabulation results, rural people Age between 41 to 50 years have low level of knowledge constitute 14%. (23 respondent) About 18.5% (30 respondent) of people have a moderate level of knowledge even though they have 12th Education Certificate.

Table 3: Level of Knowledge of Rural people based on Age and Education

Level of Knowledge			Education Level				
			Less than 10 th	10 th	12 th	Graduation	Totals
Low	Age	20 - 30 years old	1	3	3	1	8
		31 - 40 years old	2	4	3	3	12
		41 - 50 years old	2	11	5	5	23
		51 and Above	3	3	1	2	9
Moderate	Age	20 - 30 years old	1	12	1	2	16

		31 - 40 years old	2	13	3	3	21
		41 - 50 years old	4	3	30	1	38
		51 and Above	2	2	16	1	21
High	Age	20 - 30 years old	1	1	1	1	4
		31 - 40 years old	1	1	1	1	4
		41 - 50 years old	0	0	2	1	3
		51 and Above	0	1	1	1	3
Total							162

Level of Attitude of Rural Societies

Based on Table 4, the attitude of the rural peoples towards the awareness of green technology is low. This is because the majority of respondents have less willingness to pay more to acquire green technology products and not aware of harmless equipment's. However, most respondents have high awareness in electrical savings based on the answers to items 4, 5 and 6. Most of respondent are uncertain of Hybrid vehicles.

Table 4 Level of Attitude of Rural people on Green Technology

	Items	Mean	Level
1	I am willing to pay more for green technology products or equipment	1.92	Low
2	I always use green technology products both home and outdoors	2.45	Low
3	I am willing to buy eco-friendly products even though the prices are quite expensive	2.03	Low
4	I do not waste time using electricity	4.13	High
5	I rarely use electricity at night	4.06	High
6	I use electricity only when needed	4.11	High
7	I choose to use a hybrid vehicle	3.09	Moderate
8	I make sure every product and equipment used does not harm the environment	2.45	Low

While the level of attitudes shown by the elderly also illustrates that they have a moderate attitude on green technology, especially those with education 12th standard as shown in Table 5

Table 5: Level of Attitude of Rural societies based on Age and Education

Level of Attitude			Education Level				
			Less than 10th	10th	12th	Graduation	Totals
Low	Age	20 - 30 years old	4	1	1	2	8
		31 - 40 years old	1	9	1	1	12
		41 - 50 years old	3	7	7	6	23
		51 and Above	1	5	1	2	9
Moderate	Age	20 - 30 years old	2	10	2	2	16
		31 - 40 years old	1	14	2	4	21
		41 - 50 years old	4	6	28	0	38
		51 and Above	2	1	18	0	21
High	Age	20 - 30 years old	0	1	1	2	4
		31 - 40 years old	0	0	2	2	4
		41 - 50 years old	1	0	2	0	3
		51 and Above	0	0	2	1	3
Total			162				

Relationship between Awareness Level of Rural Societies on Green Technology

This study also applies Pearson's correlation analysis to see the relationship between the rural society awareness on green technology in Table 6. There is a positive and significant relationship between the level of awareness of the respondents on green technology. This shows the higher the level of awareness, the higher the level of knowledge, attitude and understanding of the rural people.

Table 6: Pearson Correlation

Awareness	Knowledge	Attitude
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Awareness	Pearson Correlation	1	.754**	.823**
	Sig. (2-tailed)		0	0
	N		100	100
Knowledge	Pearson Correlation		1	.773**
	Sig. (2-tailed)			0
	N			100
Attitude	Pearson Correlation			1
	Sig. (2-tailed)			0
	N			100

** . Correlation is significant at the 0.01 level (2-tailed).

Result of Pearson correlation show that there is a significant relationship between Awareness and Knowledge ie $r = .754$ (High Positive Correlation). The value obtained is $r = .754$ ($p = .000$). Therefore, the value of $r^2 = 0.56$ (56%). This means that the relationship between the two variables relates to Awareness and Knowledge is 56% that is moderate. Variance $r^2 = 0.56$ (56%) indicates that 56% of Green Technology Awareness is due to Knowledge. Thus, another 44% change in dependent variables may be caused by other factors. This shows that there is a significant relationship between the awareness of green technology and knowledge among villagers as respondent.

Similarly, the Pearson correlation result in Table 6 shows that there is a significant relationship between the Awareness of green technology and Attitude ie $r = .823$ (High Positive Correlation). The value obtained is $r = 0.823$ ($p = 0.000$). Therefore, the value of $r^2 = 0.67$ (67%). This means that the relationship between the two variables relates to Awareness and Attitude is 67%, which is a strong relationship. Variance $r^2 = 0.67$ (67%) indicates that 67% of Green Technology Awareness is due to Attitude. Thus, another 33% change in dependent variables may be caused by other factors. This shows that there is a significant relationship between the use of Green Technology Awareness and Attitude among the respondents.

CONCLUSION

The study highlights a significant gap in awareness and attitude towards green technology, particularly among the elderly population. Here are some key points and suggestions based on the information provided:

Low awareness among elderly people

1. The study indicates that there is a low level of awareness among the elderly regarding the use of green technology
2. Despite completing secondary school education, many elderly individuals lack exposure to the importance of green technology

Moderate Knowledge

1. Respondents show a moderate level of knowledge about green technology
2. The study suggests that fostering public awareness is crucial for improving knowledge and

comprehension levels

Need for Awareness Campaigns

1. Government and non-governmental organizations (NGOs) have conducted campaigns on green technology to achieve sustainable development and enhance quality of life.
2. The study suggests that these campaigns need to be more effective in reaching and educating the Rural population.

Low level of Attitude

1. Despite awareness campaigns, the level of attitude towards green technology remains low among the respondent.
2. Addressing this perception is essential to instil a sense of responsibility for environmental conservation
3. The study emphasizes that if the rural people have a high awareness level of green technology, it can indirectly contribute to protecting the environment for future generation.

In conclusion the study underscores the importance of targeted awareness campaigns, education initiatives, and a collaborative effort from various stakeholders to bridge the gap in knowledge and attitude towards green technology, especially among the Rural population

Reference

- [1] Shaikh, P. H., Nor, N. B. M., Sahito, A. A., Nallagownden, P., Elamvazuthi, I. & Shaikh, M. (2017). Building energy for sustainable development in Malaysia: A review. *Renewable and Sustainable Energy Reviews*, 75, 1392-1403.
- [2] Ramayah, T., Jason, W.C.L & Osman, M. (2010). Green product purchase intention: Some insights from a developing country. *Resources, Conservation and Recycling*, 54(12), 1419-1427.
- [3] Norlaila Abdullah chik. (2017). Awareness level of rural communities on the green technology and its relationship, *International Journal of Information System and Engineering*, Vol 5 No 2) 2289-7615
- [4] S. Feng, R. Zhang and G. L (2022) "Environmental decentralization digital finance and green technology innovation", *Structural Change and Economic Dynamics*, vol. 61, pp. 70-83.
- [5] M. L. Gonzaga, (2016) "Awareness and Practices in Green Technology of College Students" in *Applied Mechanics and Materials*, Trans Tech Publications Ltd, vol. 848, pp. 223-227.
- [6] Sudarkodi, P. and Manyam, (2019) Soft Skill Training Provided by Colleges with Reference to Bangalore City (December 2019). *Asia Pacific Journal of Research in Business Management* Vol. 10, Issue 12, December 2019, Available at SSRN: <https://ssrn.com/abstract=3523514>
- [7] Mustapha, I. Nashir and N. Maar (2019) of, "Awareness of green technology among engineering technology students", *Journal of engineering science and technology (special issue on ICEES2018)*, pp. 1-8.
- [8] Chu, S. & Majumdar, A. (2012). Opportunities and challenges for a sustainable energy future, 488(7411), 294-303.
- [8] Sudarkodi, P. (2023). Biomedical Waste Management in Private Hospitals of Bangalore. *East Asian Journal of Multidisciplinary Research*, 2(10), 4331–4336. <https://doi.org/10.55927/eajmr.v2i10.4786>