



AWARENESS AND PERCEPTION OF INDIAN CUSTOMERS REGARDING GREEN BANKING: AN ANALYSIS

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Abstract

“Going Green” is becoming a world-wide revolution. Every country, society and industry is becoming conscious of its actions. Customers are mindful of the impact their choices make on sustainability. Banking industry in India is making efforts to become “Green”. Banks are working towards reducing their carbon foot-print by opting for sustainable options. They are reducing paper wastage, investing in eco-friendly energy generation projects, evaluating projects based on their environmental impact, promoting electronic banking, educating customers about the various benefits of Green Banking products and services etc. Banks are adopting different means to spread information about green services. But what needs to be seen is how aware are the customers with respect to these practices and their intended benefits. The present study evaluates the awareness and perception of customers regarding Green Banking practices. Awareness of customers regarding concept of Green banking and opening bank accounts online. Difference in perception with respect to gender has been analysed.

Keywords: banks, customers, environment, green, sustainability

I. Introduction

Green bank is any bank that is purposefully opting environment friendly practices to reduce its carbon foot-print. Green banking (or ethical banking or sustainable banking) is a genre of banking practices which considers all the social and environmental/ecological factors with an aim to protect the environment and conserve natural resources (Bangladesh Bank, 2020).

Sustainability is an issue of growing concern. Various global initiatives like summits and discussions by the United Nations Framework Convention on Climate Change, the Paris Agreement, Sendai Framework for Disaster Risk Reduction, the Quito Declaration on Sustainable Cities and human Settlements for All etc. are being taken in order to combat environmental degradation. With growing environmental consciousness, banks are adopting Green banking initiatives like providing e-banking services, Green debit/ credit cards, Green savings account, Green bonds, Green financing etc. Banks are investing in projects which contribute positively to the environment and society. The Indian Banking sector is making efforts to become Green and reduce its impact on the environment.

Banks are adopting different means and mechanisms to inform and encourage customers about the concept of Green Banking. Efforts are being made to educate customers about the benefits of adopting Green Banking practices. To check the effectiveness of these efforts, it is important to evaluate the awareness and perception of Indian banking customers with respect to Green Banking.

II. Objectives

The objectives of the paper are

- To study the awareness of customers regarding concept of Green Banking.

- To assess the awareness of customers about option to open bank accounts online.
- To examine perception of customers towards Green Banking.
- To evaluate difference in perception of customers with respect to gender.

III. Research methodology

The study is based on analysis of data collected using a structured questionnaire. The questionnaire was divided into three sections- personal profile, awareness and perception regarding Green Banking. The questionnaire was administered to a sample of 404 customers from Karnal district and Chandigarh U.T. of Haryana, India. Due to paucity of resources, convenience sampling was used. The data was analysed using cross tabulation, mean, standard deviation, correlation and independent t-test.

IV. Hypothesis

H₀: There is no significant difference between perception of male and female customers on green banking practices.

V. Review of literature

Marr and Prendergast (1993), Javelin Research (2009) and Rai et al. (2019) studied the perception of customers in retail banking sector regarding sustainable practices. **Curran and Meuter (2005), Dixit and Datta (2010), Shantha (2019), S. and Joshi (2022) and Sharma and Sofat (2022)** conducted a research to find the factors motivating consumers to adopt sustainable banking practices. **Gupta and Goldar (2005)** found that customers were becoming environmentally conscious. **Devkota et. al. (2021)** studied the level of understanding about Green banking practices. **Sharma et al. (2014), Narmadha (2016), Dhamija and Sahni (2018), Easwari and Priya (2019), Pillar R and Raj D (2019) and Raichandani (2022)** studied the perception and awareness of customers in India regarding Green banking services.

The present study attempts to analyse the awareness and perception of customers towards Green Banking in Karnal district and Chandigarh U.T. of Haryana.

VI. Results and discussion

Table 1 below shows the demographic profile and awareness of customers regarding Green Banking. A total of 404 respondents were taken as the sample. Figure 1 shows that majority of the respondents (26.98%) were of the 18-25 years age group. As per gender wise distribution shown in figure 2, 51.24% were males and 48.76% were females. Figure 3 shows that most of the respondents (47.77%) were post-graduate. Figure 4 shows that most of the respondents (32.18%) earned above ₹80,000 per month. It can be seen from figure 5 that majority of the respondents (62.38%) had accounts in public sector banks only.

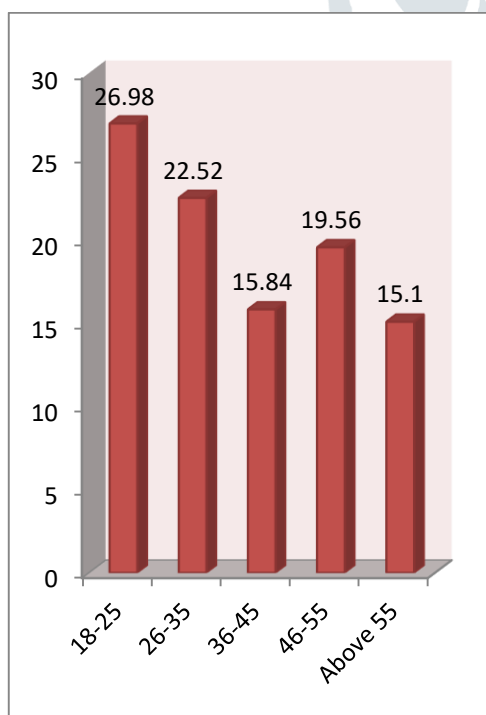


Fig. 1: Age-wise distribution of respondents

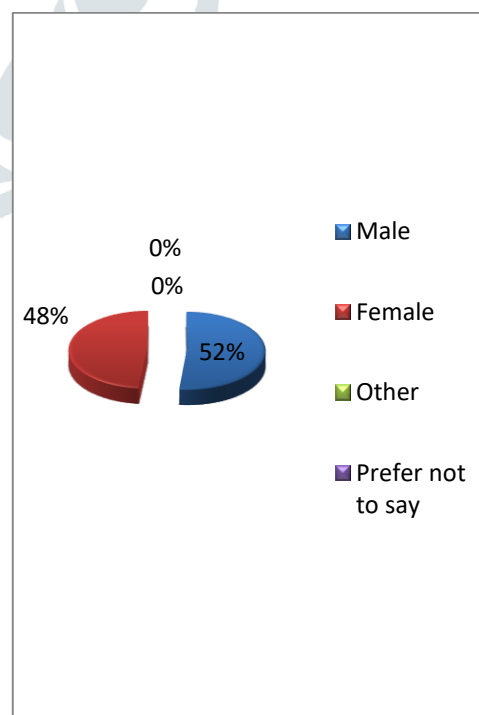


Fig. 2: Gender-wise distribution of respondents

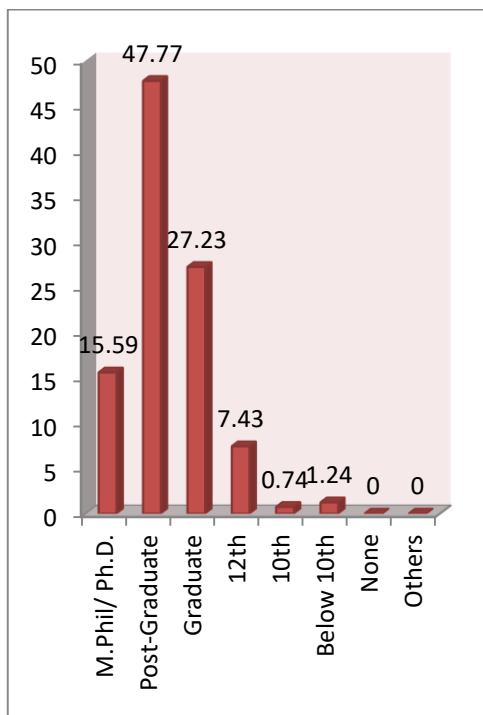


Fig. 3: Educational qualification wise distribution

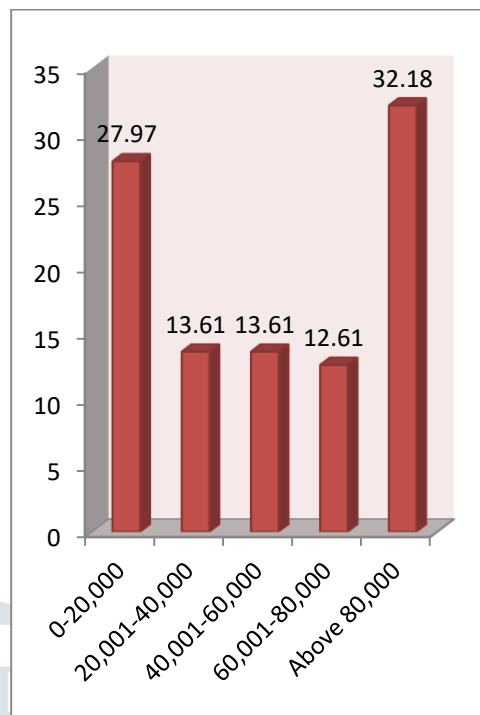


Fig. 4: Monthly income wise distribution

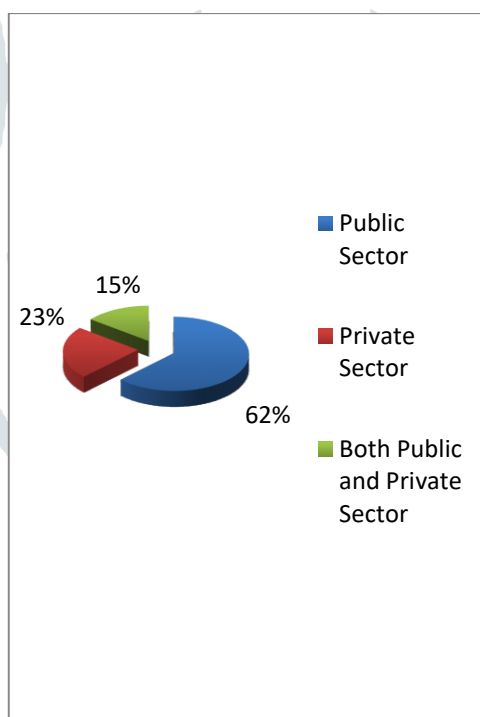


Fig. 5: Banking sector-wise distribution of respondents

As for awareness of customers regarding Green banking, Table 1 shows that 85.89% were found to be aware and 14.11% were unaware. Distribution of respondents as per age showed 89.06% were 36-45 years of age, followed by 86.81% in 26-35 years and 86.08% of respondents in 46-55 years of age group. 19.67% of respondents of the age group of above 55 years were most unaware. Females (87.82%) were found to be more aware as compared to males (84.06%). 100% of the respondents who were 10th standard qualified were aware about Green banking. Those qualified below 10th standard (80%) were most unaware. While those earning between ₹0-₹20,000 (20.35%) were most unaware, respondents earning between ₹60,001-₹80,000 (94.12%) were most aware. As per distribution with respect to banking sector, those with accounts in only public sector banks (86.51%) were most aware. Those with accounts in both public and private sector banks were most unaware (15.25%).

Table 1: Cross tab for awareness of customers regarding Green Banking

Variable		Awareness		Total
		Yes	No	
Age	18-25	94 (86.24)	15 (15.76)	109 (26.98)
	26-35	79 (86.81)	12 (13.19)	91 (22.52)
	36-45	57 (89.06)	07 (10.94)	64 (15.84)
	46-55	68 (86.08)	11 (13.92)	79 (19.55)
	Above 55	49 (80.33)	12 (19.67)	61 (15.11)
	Total	347 (85.89)	57 (14.11)	404 (100)
Gender	Male	174 (84.06)	33 (15.94)	207 (51.24)
	Female	173 (87.82)	24 (12.18)	197 (48.76)
	Total	347 (85.89)	57 (14.11)	404 (100)
Educational qualification	M.Phil/ Ph.D	53 (84.13)	10 (15.87)	63 (15.59)
	Post-Graduate	169 (87.56)	24 (12.44)	193 (47.77)
	Graduate	94 (85.45)	16 (14.55)	110 (27.23)
	12 th Standard	27 (90)	03 (10)	30 (7.42)
	10 th Standard	03 (100)	00 (00)	03 (0.74)
	Below 10 th Standard	01 (20)	04 (80)	05 (1.24)
	None	00 (00)	00 (00)	00 (00)
	Others	00 (00)	00 (00)	00 (00)
	Total	347 (85.89)	57 (14.11)	404 (100)
Monthly Income	0-20,000	90 (79.65)	23 (20.35)	113 (27.97)
	20,001-40,000	46 (83.64)	09 (16.36)	55 (13.61)
	40,001-60,000	50 (90.91)	05 (9.09)	55 (13.61)
	60,001-80,000	48 (94.12)	03 (5.88)	51 (12.62)
	Above 80,000	113 (86.92)	17 (13.08)	130 (32.18)
	Total	347 (85.89)	57 (14.11)	404 (100)
Banking Sector	Public sector	218 (86.51)	34 (13.49)	252 (62.38)
	Private sector	79 (84.95)	14 (15.05)	93 (23.02)
	Public and Private sector	50 (84.75)	09 (15.25)	59 (14.60)
	Total	347 (85.89)	57 (14.11)	404 (100)

Source: SPSS

As shown in Table 2, 80.94% of the total respondents were aware about the option to open bank accounts online and 19.06% were unaware about it. As per age-wise distribution, the most aware respondents (87.91%) belonged to 26-35 years of age. Those in the age group of 18-25 years were most unaware (28.44%). More males were aware (85.99%) as compared to females. Distribution of respondents as per educational qualification showed that post-graduates were most aware (88.08%) and those qualified below 10th standard were most unaware (100%). Respondents earning above ₹80,000 monthly were found to be most aware (89.23%). Those

earning between ₹0-₹20,000 were most unaware (36.28%). Those with bank accounts in both public and private sector were most aware (89.83%). Those with bank accounts in only public sector banks were most unaware (21.03%).

Table 2: Cross tab for awareness of customers regarding option to open bank accounts online

Variable		Awareness		Total
		Yes	No	
Age	18-25	78 (71.56)	31 (28.44)	109 (26.98)
	26-35	80 (87.91)	11 (12.09)	91 (22.52)
	36-45	54 (84.38)	10 (15.62)	64 (15.84)
	46-55	67 (84.81)	12 (15.19)	79 (19.55)
	Above 55	48 (78.69)	13 (21.31)	61 (15.11)
	Total	327 (80.94)	77 (19.06)	404 (100)
Gender	Male	178 (85.99)	29 (14.01)	207 (51.23)
	Female	149 (75.63)	48 (24.37)	197 (48.76)
	Total	327 (80.94)	77 (19.06)	404 (100)
Educational qualification	M.Phil/ Ph.D	47 (74.60)	16 (25.40)	63 (15.59)
	Post-Graduate	170 (88.08)	23 (11.92)	193 (47.77)
	Graduate	86 (78.18)	24 (21.82)	110 (27.23)
	12 th Standard	22 (73.33)	08 (26.67)	30 (7.42)
	10 th Standard	02 (66.67)	01 (33.33)	03 (0.74)
	Below 10 th Standard	00 (00)	05 (100)	05 (1.24)
	None	00 (00)	00 (00)	00 (00)
	Others	00 (00)	00 (00)	00 (00)
	Total	327 (80.94)	77 (19.06)	404 (100)
Monthly Income	0-20,000	72 (63.72)	41 (36.28)	113 (27.97)
	20,001-40,000	45 (81.82)	10 (18.18)	55 (13.61)
	40,001-60,000	49 (89.09)	06 (10.91)	55 (13.61)
	60,001-80,000	45 (88.24)	06 (11.76)	51 (12.62)
	Above 80,000	116 (89.23)	14 (10.77)	130 (32.18)
	Total	327 (80.94)	77 (19.06)	404 (100)
Banking Sector	Public sector	199 (78.97)	53 (21.03)	252 (62.38)
	Private sector	75 (80.65)	18 (19.35)	93 (23.02)
	Public and Private sector	53 (89.83)	06 (10.17)	59 (14.60)
	Total	327 (80.94)	77 (19.06)	404 (100)

Source: SPSS

Table 3 below shows that mean is near 3 and 4 in the statements. This shows that most of the respondents were in agreement with the statements. While most of the responses variate from their mean based on standard deviations, “Green banking enhances banking output and quality”, “Green Banking services are consumer friendly”, “I understand Green banking practices”, “Green

banking includes paperless banking”, “Green Banking helps protect the environment”, “Green banking services increase ease of banking”, “Green banking helps save time and energy”, “Banks should educate customers about Green banking” show no variation.

Table 3: Likert scale analysis for perception customers towards green banking

S. No.	Perception	Mean	Standard Deviation	Variation
1.	Green banking enhances banking output and quality	4.0718	0.97477	No
2.	Green Banking services are consumer friendly	4.0321	0.99699	No
3.	I understand Green banking practices	3.9406	0.98698	No
4.	My bank has the necessary infrastructure to implement Green Banking	3.9208	1.02507	Yes
5.	Green banking includes paperless banking	4.2649	0.97951	No
6.	Green Banking helps protect the environment	4.3490	0.96088	No
7.	My bank encourages Green Banking	3.9009	1.08456	Yes
8.	My bank offers information about Green banking services	3.7029	1.14284	Yes
9.	Customers are willing to opt for Green banking services	3.6906	1.02126	Yes
10.	Green banking services are easy to use	3.9529	1.01123	Yes
11.	Banks are adopting Green Banking practices due to societal pressure	3.3886	1.14244	Yes
12.	Banks are adopting Green Banking practices to improve their image	3.7376	1.01623	Yes
13.	Banks are adopting Green banking practices due to Government regulations	3.8267	1.01828	Yes
14.	Green banking services increase ease of banking	4.0742	0.95008	No
15.	E-banking transactions are easy to trace	4.0729	1.04663	Yes
16.	Internet banking reduces risk of loss/theft	3.4480	1.20576	Yes
17.	Reward point system encourages customers to opt Green banking services	3.8614	1.07791	Yes
18.	Green banking services make bank transactions safe and secure	3.6807	1.10918	Yes
19.	Customers lack information about Green banking	3.7698	1.07716	Yes
20.	Green banking helps save time and energy	4.2203	0.95998	No
21.	Green banking helps reduce risk of identity theft	3.5594	1.17413	Yes
22.	Banks should educate customers about Green banking	4.3069	0.97861	No
23.	Green banking is a new concept for Indian Banking sector	4.0222	1.00470	Yes
24.	I am willing to switch banks if competition provides Green banking options	3.7995	1.12578	Yes
25.	Availability of Green banking services is a criteria while choosing a bank	3.7302	1.10670	Yes
	N=404			

Source: SPSS

Table 4 tests the hypothesis:

H₀: There is no significant difference between perception of male and female customers on green banking practices.

Analysis of perception showed that for most of the statements, no significant difference was found between males and females. Significant difference between perception of males and females was found for “I understand Green banking practices”, “My bank offers information about Green banking services” and “Banks are adopting Green Banking practices to improve their image”.

Table 4: Independent t-test

S. No.	Perception	Levene's Test for Equality of Variances		t-test for Equality of Means		Hypothesis
		Equal Variance assumed	Sig.	Equal Variance not assumed	Sig. (2-tailed)	
1.	Green banking enhances banking output and quality	Assumed	0.0993964	*****	*****	Not rejected
2.	Green Banking services are consumer friendly	Assumed	0.2582858	*****	****	Not rejected
3.	I understand Green banking practices	Assumed	0.04050128	Not assumed	0.0398258	Rejected
4.	My bank has the necessary infrastructure to implement Green Banking	Assumed	0.11133592	*****	*****	Not rejected
5.	Green banking includes paperless banking	Assumed	0.5993819	*****	*****	Not rejected
6.	Green Banking helps protect the environment	Assumed	0.2050854	*****	*****	Not rejected
7.	My bank encourages Green Banking	Assumed	0.08970514	*****	*****	Not rejected
8.	My bank offers information about	Assumed	0.01648896	Not	0.0162189	Rejected

	Green banking services			assumed		
9.	Customers are willing to opt for Green banking services	Assumed	0.3787324	*****	*****	Not rejected
10.	Green banking services are easy to use	Assumed	0.390788	*****	*****	Not rejected
11.	Banks are adopting Green Banking practices due to societal pressure	Assumed	0.5747903	*****	*****	Not rejected
12.	Banks are adopting Green Banking practices to improve their image	Assumed	0.0054305	Not assumed	0.0054343	Rejected
13.	Banks are adopting Green banking practices due to Government regulations	Assumed	0.779708	*****	*****	Not rejected
14.	Green banking services increase ease of banking	Assumed	0.18621102	*****	*****	Not rejected
15.	E-banking transactions are easy to trace	Assumed	0.4141173	*****	*****	Not rejected
16.	Internet banking reduces risk of loss/theft	Assumed	0.35306906	*****	*****	Not rejected
17.	Reward point system encourages customers to opt Green banking services	Assumed	0.5997185	*****	*****	Not rejected
18.	Green banking services make bank transactions safe and secure	Assumed	0.32011824	*****	*****	Not rejected
19.	Customers lack information about Green banking	Assumed	0.9007199	*****	*****	Not rejected
20.	Green banking helps save time and energy	Assumed	0.07114322	*****	*****	Not rejected
21.	Green banking helps reduce risk of identity theft	Assumed	0.8123128	*****	*****	Not rejected
22.	Banks should educate customers about Green banking	Assumed	0.2052209	*****	*****	Not rejected
23.	Green banking is a new concept for Indian Banking sector	Assumed	0.2598402	*****	*****	Not rejected
24.	I am willing to switch banks if competition provides Green banking options	Assumed	0.26937444	*****	*****	Not rejected
25.	Availability of Green banking services is a criteria while choosing a bank	Assumed	0.3297285	*****	*****	Not rejected

Source: SPSS

Findings

The study found that majority of respondents was aware about Green Banking and option to open bank accounts online. Efforts being made by banks to inform customers about Green banking practices and its benefits were effective. Also, there wasn't much difference between perception of males and females regarding Green Banking.

Conclusion

The Indian Banking Sector is gaining consciousness towards the impact its working has on environmental sustainability. The Indian customer is also self-aware of its actions on environment and society. Customers are demanding Green options. Banks are slowly moving towards Green and sustainable banking by implementing eco-friendly practices in place of traditional ones. Banks are conducting seminars, sending SMSs and e-mails, publishing researches etc. to educate customers about the concept and benefits of Green banking. Customers understand the concept and are willing to productively adopt Green practices. However, there still is a long way to go. Indian banks still need to make a lot of efforts to bring about a radical change and actually go "Green". All industries, sectors, authorities and citizens must participate to develop environment friendly services to make a positive impact and slow down environmental degradation. Indian banks should adopt international initiatives and invest in innovating new Green products and technologies. Government should implement proper guidelines regarding Green Banking and encourage sustainable bank practices.

References

- Bangladesh Bank. (2020). *Quarterly Review Report on Green Banking Activities of Banks & Financial Institutions and Green Refinance Activities of Bangladesh Bank*. https://www.bb.org.bd/pub/quarterly/greenbanking/greenbanking_janmar2020.pdf
- Curran, J.M., & Meuter, M.L. (2005). Self-Service Technology Adoption: Comparing Three Technologies. *Journal of Services Marketing*.

- Devkota, N., Paudel, U.R., & Khanal, G. (2021). Is current understanding adequate for Green Banking Practices in Nepal: A Lesson Learned. *Handbook of Research on Climate Change and The Sustainable Financial Sector*. Doi: 10.4018/978-1-7998-7967-1.ch006.
- Dhamija, A., & Sahni, D. (2018). Green Banking: Perception and Willingness of Customers to Adapt Green Banking. *International Journal of Financial Management*, 7(2), 1-8.
- Dixit, N., & Datta, S.K. (2010). Acceptance of e-banking among Adult Customers: An Empirical Investigation in India. *The Journal of Internet Banking and Commerce*, 15(2), 1-17.
- Easwari, S.R., & Priya, L.S. (2019). A Study on Awareness of Customers towards Green Banking with special reference to SBI in Nagercoil. *International Journal of Research in Advent Technology*, 7(3), 935-939.
- Gupta, S., & Goldar, B. (2005). Do Stock market penalise Environment-Unfriendly Behaviour? Evidence from India. *Ecological Economics*, 52(1), 81-95.
- Javelin Strategy and Research. (2009). Consumers Think Green, But Don't Act that Way. *Credit Union Journal*, 13(1).
- Marr, N.E. and Prendergast, G.P. (1993). Consumer Adoption of Self-service Technologies in Retail Banking: Is Expert Opinion Supported by Consumer Research? *International Journal of Bank Marketing*, 11(1), 3-10.
- Narmadha, M. (2016). A Study of Customer Awareness on Green Banking in Selected Public and Private Sector Banks in Chennai. *International Journal of Management*, 7(2), 24-35.
- Pillar, R. P., & Raj D. P. (2019). Perspective and Usage Patterns of Green Banking Services: A Cross-Sectional Analysis of Customers from Selected Banks in Kerala. *RESEARCH REVIEW International Journal of Multidisciplinary*, 4(2), 285-292
- Rai, R., Kharel, S., Devkota, N., & Paudel, U.R. (2019). Customers Perception on Green Banking Practices: A Desk Review. *The Journal of Economic Concerns*, 10(1), 82-95.
- Raichandani, R. (2022). Customers' view on Green Banking- An empirical study. *IJRESM*, 5(2), 181-185.
- S., S., & Joshi, K. (2022). A Study on Factor Influencing the Millennials in Adoption of Green Banking Products with Special reference to Working Population of Bengaluru City. *SJCC Management Research Review*, 11(3), 69-79. <https://doi.org/10.35737/sjccmrr/v11/i3/2021/147>.
- Shantha, A.A. (2019). Customers' Intention to use Green banking Products: Evidence from Sri Lanka. *IJSRP*, 9(6), 148-161. <http://dx.doi.org/10.29322/IJSRP.9.06.2019.p9029>.
- Sharma, N., Sarika, K., & Gopal, R. (2014). A Study on Customer's Awareness on Green Banking Initiatives in Selected Public and Private Sector Banks with Special Reference to Mumbai. *IOSR Journal of Economics and Finance*, 28-35.
- Sharma, R., & Sofat, R. (2022). Antecedents influencing usage of Green Banking Practices: A Study of Indian Banks. *International Journal of Green Economics*, 15(4), 321-334.

