

## IN-HOUSE GREEN BANKING IN KOOATHATTUKULAM MUNICIPALITY- AWARENESS AND USAGE BY SALARIED CLASS

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### **Abstract**

*Climate change is a significant issue for India causing a risk to the health, economy and the environment of the country. Banking sector plays a crucial role in promoting environmentally sustainable and socially responsible investment. Internal environmental impact of the banking sector such as use of energy, paper and water is comparatively low and clean. Environmental impact of banks is not physically related to the banking activities but with its customer's activities. Green banking is an environment friendly banking practices and reducing carbon footprint from banking activities. It is a form of banking which ensures less utilisation of natural resources and optimal reduction of wastage of paper/carbon footprint. Creating clean and hygienic banking environment, green building, reforestation, online banking, waste management, installation of solar panel on the rooftop of the bank and using high mileage vehicle, reducing sound pollution, using webcam for video conferencing instead of physical meetings, online statements, emailing documents are included in the inhouse green banking. The present study measures the awareness and use of green banking products by the salaried class in Koothattukulam municipality.*

**Key words:** *green banking, salaried class, awareness, usage of green banking products.*

### **Introduction**

Green banking is one of the most talkative issues nowadays in the financial sector. All over the world financial institutions are trying to contribute to protect the environment (Rahman & Ziaur, 2019). Climate change is a significant issue for India causing a risk to the health, economy and the environment of the country. Banking sector plays a crucial role in promoting environmentally sustainable and socially responsible investment. Banks may not be polluters themselves and such sector is reckoned as environment friendly in terms of emissions and pollutions. Banks can provide important leadership for the required economic transformation that will provide new opportunities for financing and investment policies as well as portfolio management for the creation of a strong and successful low carbon economy (Broto & Aarushi, 2013). As providers of finance bank can ensure that businesses adopt environment-friendly practices. Incentives by way of offering cheaper funds for adopting green technologies will have a long-term beneficial impact on the environment. As major implementers of technology, banks themselves can adopt green practices and thereby lead the way in this global initiative. Also, product innovation and leveraging on the use of technology enable banks and their customers today to reduce the usage of resources such as paper, thereby aiding in environmental protection (Amandeep & Damanjit, 2017). Internal environmental impact of the banking sector such as use of energy, paper and water is comparatively low and

clean. Environmental impact of banks is not physically related to the banking activities but with its customer's activities. It is an environment friendly banking practices and reducing carbon footprint from banking activities. It is a form of banking which ensures less utilisation of natural resources and optimal reduction of wastage of paper/carbon footprint. It is being practiced by all banks, which consider all the social and environmental /ecological factors with an aim to protect the environment and conserve natural resources (Suresh & Bhavna, 2015). There are two ways of green banking practices. Inhouse green banking and practice by bankers in their business area. Creating clean and hygienic banking environment, green building, reforestation, online banking, waste management, installation of solar panel on the rooftop of the bank and using high mileage vehicles, reducing sound pollution, using webcam for video conferencing instead of physical meetings, online statements, emailing documents are included in the inhouse green banking. Financing the green projects like bio-gas plant, solar/renewable energy plant, bio fertilizer plant, effluent treatment plant (ETP), projects having ETP, working on specific green projects, voluntary activities of banks are major practices by the bankers in their business areas.

### **Review of literature**

Financial Institutions (FIs), the key constituent for the development of a country, can improve their service level along with enhanced social responsibility through the practice of green financing. Initiatives have been taken to practice green financing throughout the economy covering banks and other non-banking financial institutions (Islam, Salahuddin, & Kh, 2014). Green banking is the practices and guidelines that make banks sustainable in economic, environment and social dimensions. It aims to make banking process and the use of IT and physical infrastructure as efficient and effective as possible, with zero or minimal impact on the environment (Leroy, 2017). Adoption of green banking practices will not only be useful for environment but also benefit in greater operational efficiencies, a lower vulnerability to manual errors, fraud and cost reductions in banking activities (Amruth, Sravanthy, & Shaik, 2017). Increasingly banks are consciously lending to projects that are green, opening branches that are energy efficient and environmental friendly and using recycled paper for printing cheque book. Among the public sector banks, the state bank of India, as part of its green banking policy has set up windmills to generate 15MW power in Tamilnadu, Maharashtra and Gujarat for its own consumption, becoming first in Indian bank to do so (kriti, 2013).

Green banking now is not only limited to awareness but also in practice. It is now expected from all scheduled banks that they would not only allocate budget for green finance, green event or green projects under CSR activities, green marketing and capacity building but ensure the efficient utilisation of budget allocation (Raad, 2015). Green banking implies not only the creation of green products, but also the incorporation of environmental indicators in the risk assessment and control process. Overcoming climate change and pollution is a causa perduta without the active participation of banks (Virginia & Yakim, 2015). Green management organisations have to go beyond regulatory compliance and needs to include conceptual tools such as pollution prevention, product stewardship and corporate social responsibility. The needs for efficient use of resources and environment friendly corporate polices and behaviours have now been recognised all over the world. The performance of an enterprise can no longer be evaluated on the basis of economic parameters alone and it needs to be integrated with environmental performance as well (Broto & Aarushi, Green Banking strategies: Sustainability through corporate entrepreneurship, 2013). The review of literature

shows that no study has conducted so far to look into the awareness and usage of green banking products by the salaried class in Koothattukulam Municipality.

### Significance and scope of the study

The banking industry plays an important intermediary role in economic growth and environmental protection by promoting environmentally sustainable and socially responsible institutions. Online banking helps reduce paperwork and the need to travel to bank branches. Change is the need of the hour for survival in all spheres. Green banking undertakes proactive measures to protect environment and to address climate change challenges while financing along with efficient use of renewable, non-renewable human and natural resources. The effectiveness of all such measures depend upon the support and cooperation render by the general public. In order to support such efforts, first of all the general public have to come to know about the such efforts. And it is to be started from the educated ones. Hence, a study to look into the awareness and usage of such services by the salaried class in the study area is found relevant. Inhouse green banking includes so many activities. But the scope of present study is limited to the examination of awareness and use of green banking products by the salaried class (employees in the schools, revenue offices and other offices like LSGs/hospitals) in Koothattukulam Municipality.

### Objective of the study

1. To measure the extent of awareness and its influence on the use of green banking products among the salaried class in Koothattukulam Municipality.

### Hypothesis

1. The usage of green banking products by the salaried class is significantly dependent on the awareness towards green banking products.

### Methodology

The study is empirical in nature. It has been used both secondary and as well as primary data. The secondary data have been collected from scholarly articles. The primary data have been gathered from conveniently selected respondents in the revenue offices, higher secondary schools and hospitals/LSGs in Koothattukulam Municipality. Total of 40 samples (20 teachers from various higher secondary schools, 10 officials from revenue offices and 10 other officials from hospitals and LSGs) were picked and approached for gathering primary data. The collected data had been analysed by means of simple percentage, one sample t-test, correlation and simple regression.

### Results and discussions

The socio-economic profile of the respondents is represented in tables 1 and 2 below:

**Table 1: Social profile of the respondents**

Particulars		Frequency	Percentage
Gender	Male	23	57.5
	Female	17	42.5
Age	Up to 30 years	24	60
	Above 30 years	16	40

Marital status	Single	13	32.5
	married	27	67.5
Educational qualification	Graduation	14	35
	Postgraduation	23	57.5
	MBBS/MD	3	7.5
Field of employment	Schools	20	50
	Revenue	10	25
	Others (LSGs/hospitals)	10	25
Position (designation)	Teachers	20	50
	Revenue officials	10	25
	Others	10	25

Source: field survey

Table 1 exhibits that a good number of the respondents is males (57.5 percent) and is married (67.5 percent). The educational qualification of the majority (57.5 percent) is postgraduation. Half of the respondents are from schools and the rest of the quarters each are from revenue and other field like hospitals and LSGs and they respectively hold the positions as teachers, revenue officials and other officials (viz., doctors, secretaries, clerks etc.). The economic profile of the respondents is shown in table 2 below:

**Table 2: Economic profile of the respondents**

Categories		Frequency	Percentage
Bank account in	SBI	20	50
	Canara	7	17.5
	Federal	4	10
	BOB	3	7.5
	HDFC	6	15
e-banking	Mobile	22	55
	internet	18	45
Monthly income	Up to Rs. 30000	2	5
	Rs. 30000 to 60000	34	85
	Above Rs.60000	4	10
Monthly expenditure	Up to Rs. 20000	7	17.5
	Rs. 20000 to 40000	28	70
	Above Rs.40000	5	12.5
Monthly savings	Up to Rs.10000	26	65
	Rs. 10000 to 20000	7	17.5
	Above Rs.20000	7	17.5

Source: field survey

Table 2 shows that, half of the respondents keep their accounts in SBI and the next half keep their accounts in Canara bank (17.5 percent), HDFC (15 percent), federal bank (10 percent), and BOB (7.5 percent) respectively. A good percent (55) use mobile banking and the rest (45 percent) uses internet banking facilities. Monthly income of the majority (85 percent) ranges in between Rs.30000 to 60000. The monthly expenditure of the majority (70 percent) is in between Rs.20000 to 40000 and they (65 percent) save up to Rs 10000 a month.

### *Awareness towards of inhouse green banking (retail) products*

The awareness of the salaried class as regards the in- house green banking products is evaluated by looking into their knowledge and use of green banking activities on eleven variables. The respondents were asked to give their responses about these eleven variables on a five-point Likert's scale. The five different responses options are 'highly unaware', 'unaware', 'neutral', 'aware' and 'highly aware' and these response options carry scores 1 to 5 points respectively.

### *Green banking awareness and usage - individual variables*

The individual mean score of these variables are calculated and one sample t-test is applied to know about the awareness and usage of green banking by the salaried class on each of these eleven variables. The individual mean score is shown table 3 below:

**Table 3: Individual mean scores – awareness and usage - green banking products**

<i>Inhouse green banking(retail) products</i>	<i>Awareness</i>		<i>Usage</i>	
	<i>Mean</i>	<i>p-value</i>	<i>Mean</i>	<i>p-value</i>
Finance for eco-friendly business activities	2.50	0.046*	2.15	0.001**
Finance for waste disposal plant/bio gas plants	2.68	0.190	2.48	0.026*
Finance for renewable energy projects	2.70	0.210	2.48	0.047*
Finance for energy efficient vehicles (vehicle loans)	3.25	0.256	2.78	0.352
Finance for purchasing energy efficient household appliances/devices	3.08	0.763	2.90	0.691
Anytime anywhere (electronic) banking	4.38	<0.001**	4.30	<0.001**
Use of debit/credit cards for purchasing items	4.43	<0.001**	4.10	<0.001**
Use of debit cards for withdrawal/deposits of cash	4.00	<0.001**	3.68	0.004**
Remote deposit capture – (remotely transmitting cheque images to a bank)	2.53	0.068	2.78	0.377
Paperless statements, product information guides etc to customers	2.53	0.058	2.95	0.836
Reward points (that can be converted into cash) for the paperless payments	2.65	0.156	2.48	0.047*

Source: field survey

Note: \* and \*\* denotes significant at 5 percent and 1 percent respectively

From table 3, it is seen that the respondents have only a moderate level of awareness as regards the financing of the banks for waste disposal /bio gas plants (mean score =2.68, p-value = 0.190), for renewable energy projects (mean score =2.70, p-value =0.210), for energy efficient vehicles (mean score =3.25, p-value =0.256), remote deposit capture (mean score =2.53, p-value =0.068), paper less statements, products information guides etc to customers (mean score =2.53, p-value =0.058) and reward points for paperless payments (mean score =2.65, p-value =0.156). The respondents possess good awareness about the anytime/anywhere banking (mean score =4.38, p-value <0.001\*\*), encouragement of banks to use debit /credit cards for purchasing items (mean score =4.43, p-value <0.001\*\*) and encouragement of banks

to use debit cards to withdraw /deposit of cash(mean value =4.00, p-value <0.001\*\*). But the awareness of the customers as regards the green financing of the bankers for the eco-friendly business activities is low (mean score = 2.50, p-value 0.046\*).

The use of green banking products viz., finance for eco-friendly business activities (mean score =2.15, p-value = 0.001\*\*), finance for waste disposal plant (mean score =2.48, p-value =0.026\*), finance for renewable energy projects (mean score =2.48, p-value =0.047\*) redeeming reward points for card-less payments (mean score =2.48, p-value =0.047\*) is negative/low. The usage of finance for energy efficient vehicles (mean score=2.78, p-value 0.352), finance for energy efficient household appliances /devices (mean score =2.90, p-value =0.691), remote deposit capture (2.78, p-value =0.377) and paperless statements, product information guides (mean score=2.95, p-value =0.836) is moderate. But the usage of anytime/anywhere banking (mean score =4.30, p-value <0.001\*\*), debit /credit card for purchasing items (mean score =4.10, p-value<0.001\*\*), debit card for withdrawing/depositing cash (mean score =3.68, p-value =0.004\*\*) is high.

### ***Overall awareness and usage - collective opinion***

The collective mean score of these eleven variables is also arrived at to form a meaningful conclusion about the overall awareness as well as usage. The summated mean score of awareness of all the 40 sample respondents with respect to above mentioned 11 sub-variables is calculated. Then the central value (Q2) applicable to such factors (awareness and usage) is calculated by applying the formula (number of variables x 5 + the number of variables x 1)/2. Then the mean score was compared with the central value (second quartile or Q2) applicable to the collective variables to check whether there is a difference between the two if any. The result revealed the collective view of all the respondents about their awareness towards green banking products. The awareness of the respondents is treated as very low or low when the mean score is less than the second quartile. It is treated as average when the mean score is equal to second quartile. The awareness is treated as high or very high if it is above the second quartile (Jojo, 2008). The following table 4 shows the criteria for comparing the mean score and the central value.

**Table 4: Criteria for comparing mean score and central value - inhouse green banking-Awareness and usage**

<b>Mean score</b>	<b>Opinion (Awareness)</b>
Below Q1 (16.5)	Highly unaware (very low)
Above Q1 (16.5) but significantly below Q2 (33)	Unaware (low)
In the neighbourhood of Q2 (33)	Neutral (moderate)
Significantly above Q2 (33) but below Q3 (49.5)	Aware (high)
Above Q3 (49.5)	Highly aware (very high)

Source: compiled by the researcher

Where;  $Q1 = (\text{minimum possible score} + \text{Maximum possible score}) \times \frac{1}{4}$

$Q2 = (\text{minimum possible score} + \text{maximum possible score}) \times \frac{2}{4}$

$Q3 = (\text{minimum possible score} + \text{maximum possible score}) \times \frac{3}{4}$

One sample t-test was carried out to see whether the overall awareness of the salaried class significantly differ from the moderate or neutral state of response (second quartile). The hypothesis and the test result are given below:

Ho: the salaried class possess a moderate (average) level of awareness with respect to the green banking products.

Ha: the salaried class do not possess a moderate (average) level of awareness with respect to the green banking products.

**Table 5: test statistics – one sample t-test- awareness and usage - green banking**

	Samples	mean	Standard deviation	t- value (test value =33)	p- value
Awareness	40	34.70	9.389	1.145	0.259
usage	40	33.05	11.803	0.027	0.979

Source: field survey

Note: p-value is not significant at five percent level and hence the mean value is in the neighbourhood of central value of 33.

Table 5 exhibits that the awareness and usage of green banking products by the respondents is only moderate/average (p-values =0.259 and 0.979). Hence it is failed to rejected the null hypothesis and concluded that the salaried class posses only a moderate awareness with respect to green banking as well as their usage too is only moderate. The comparison of the overall mean scores (mean values = 37.70 and 33.05) with the central value (Q2= 33) also confirms the same result.

#### ***Relationship between awareness and usage of inhouse green banking products***

In order to know about the relationship between the awareness and usage of green banking products by the respondents, correlation analysis is administered. The test result along with the hypothesis is presented below:

Ho: there is no significant relationship between the awareness and usage of green banking products by the respondents.

Ha: there is significant relationship between the awareness and usage of green banking products by the respondents.

**Table 6: Relationship between awareness and usage of green banking products**

	awareness	usage
awareness (Pearson Correlation)	1	0.352
p-value		0.026*
N		40

Source: field survey

Note: \*denotes significant at 5 percent level

From table 6 above, it is clear that the correlation between awareness and usage of green banking products by the respondents is 0.352 and the same is significant at five percent level of significance (p-value = 0.026\*). Hence the null hypothesis is rejected.

### *Influence of awareness on the usage of green banking products*

In order to know about the influence of awareness on the usage of the green banking products by the respondents simple regression analysis is applied. The test result is shown below:

Ho: the usage of green banking products by the respondents is not significantly dependent on the awareness.

Ha: the usage of green banking products by the respondents is significantly dependent on the awareness.

**Table 7: Influence of awareness on the usage of green banking products**

R	R <sup>2</sup>	F	p-value	B	t	p-value
0.352	0.124	5.375	0.026*	0.443	2.318	0.026

Source: field survey

Note: \*\* denotes significant at 1 percent level

From table 7 above, it is clear that the relationship between the awareness towards green banking products and its usage is 0.352. 21.4 percent of the variation in the usage of green banking products by the respondents is explained by the awareness ( $R^2 = 0.124$ ) which is significant at five percent level of significance ( $p\text{-value} = 0.026^*$ ). One unit increase in the awareness will lead to 0.443 unit increase in the usage of green banking products by the respondents that is also significant at one percent level of significance ( $p\text{-value} = 0.026^*$ ). Hence the null hypothesis is rejected.

### **Conclusion**

In a nut shell, the awareness of the respondents towards the green banking products is only at moderate level and the use of green banking products is significantly dependent on the awareness. Banks are taking much effort in the environmental perspective. But those information, especially the ones they take with regard to green financing and their paperless initiatives are not that much reached its customers. Even good salaried and educated ones like, higher secondary school teachers, the individuals working at revenue offices etc are neither much aware of such practices nor using it. If this is the situation with the salaried and educated class, then the level of understanding of the non-salaried group may be much worse. Hence sufficient efforts are to be taken by the bankers to educate the general public about their responsibility to protect the environment and hence the necessity of using green services of the banks for better, sustainable and environment friendly future. The best medium for this is the schools through which they can conduct awareness campaigns so that it reaches the elder ones through their school going children. The government offices can also insist various payments through online and thereby entertain the usage of green banking.

### **References**

- Amandeep, K., & Damanjit, S. (2017). Green Banking: A new perspective. *International Journal of Business Management*, 3(1), 1877-1884.
- Amruth, P. R., Sravanthy, M. B., & Shaik, R. B. (2017, June 24). green banking : challenges & opportunities.

- Broto, R. B., & Aarushi, M. (2013, May). Green banking strategies: Sustainability through corporate entrepreneurship. *Greener Journal of Business and Management Studies*, 3(4), 180-193.
- Broto, R. B., & Aarushi, M. (2013, May). Green Banking strategies: Sustainability through corporate entrepreneurship. *Greener Journal of Business and Management studies*, 3(4), 180-193.
- Islam, M. A., Salahuddin, Y., & Kh, F. H. (2014, August). Green financing in Bangladesh: Challenges and opportunities - descriptive approach. *International Journal of Green Economics*, 8(1), 74-91.
- Jojo, K. J. (2008). *Problems and prospects of IT industry in Kerala*. Kottayam: Mahatma Gandhi University.
- kriti, S. (2013, March). Green Banking in India: A Roadmap to Success. *IBMRD's Journal of Management and Research*, 2(1).
- Leroy, J. D. (2017). *The cost effectiveness of Green Banking and its future*. Department of Commerce, Manipal University.
- Raad, M. L. (2015). Green banking: Going green. *International Journal of Economics, Finance and Management Sciences*, 3(1), 34-42.
- Rahman, & Ziaur, M. (2019). *Green banking ; prospects and challenges in Bangladesh with highlights from Dhaka Bank Limited*. Brac University.
- Suresh, C. B., & Bhavna, P. (2015, January). Green Banking in India. *Journal of Economics and International Finance*, 7(1), 1-17.
- Virginia, Z., & Yakim, K. (2015, June). Green Banking - Definition, Scope and Proposed Business Model. *Journal of International Scientific Publications*, 9(1), 309-315.
- Virginia, Z., & Yakim, K. (2015). Green Banking - Definition, Scope and Proposed Business Model. *Journal of International Scientific Publications*, 9, 309-315.