



GMMC Journal of Interdisciplinary Studies

Vol. 13, December 2024, pp. 161-181

ISSN : 2392-4519 (Print), 3021-9086 (Online)

Journal homepage: <http://gmmcjournal.edu.np>

Employees' Perception of Green Banking Practices in Nepal

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ABSTRACT

Received: June, 2024


Revised: August, 2024

Accepted: November, 2024

Available online: December, 2024

DOI: <https://doi.org/10.3126/jis.v13i1.73351>

v13i1.73351

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Green banking differs from traditional banking as it focuses on promoting environment-friendly banking. Nowadays, due to the huge deterioration of the environment, not only human beings but also the day-to-day business environment suffers adversely. The objective of this research paper is to assess employee perceptions towards green banking practices in Nepalese commercial banks. Furthermore, the paper

aims to assess the mechanisms of green banking practices, to analyze the impact of banking activities on green banking practices, to analyze the relationship between banking activities and green banking practices, to analyze the significant difference between green banking practices and to assess the challenges of green banking practices in Nepal from the employees' angle. This study used descriptive and casual comparative research design and it took a sample of 390 employees working in three sample commercial banks. The independent variables are operational activities; employee-related practices, customer-related practices and bank's policy-related practice whereas the dependent variable is green banking practices. Based on the responses of employee, it is concluded that debit cards, mobile banking, credit cards, online banking, and electronic payment are common in Nepalese commercial banks. From the correlation and regression analysis, it was found that the independent variable has a positive significant relationship to the green banking practices. The practice of green banking is more or less similar among the sample banks and there is a lack of evidence of difference between gender and green banking practice in Nepal. Most of the employees of sample banks perceive

that the major barrier for the effective practice of green banking is customers' insufficient awareness. Hence the green banking practice is more or less compulsory for making their institution competitive so the apex body should formulate effective policies and customer and employees too aware immediately as soon as possible.

Keywords: Commercial banks, employee, banking activities, green banking, sustainability,

INTRODUCTION

Green banking (GB) is a new concept that considers environmental and social concerns when making investments. Supporting environmentally friendly methods and minimizing the carbon footprint of banking operations is referred to as 'green banking.' The bank can reduce the quantity of paperwork consumed by encouraging paperless banking through internet banking. Green banking methods must be encouraged in order to jump-start sustainable growth and address concerns such as global warming, natural disasters, and calamities. Green banking is a novel concept and practice in developing country but not in industrialized countries like the USA, hence to preserve the environment from calamity, sustainable banking must be prioritized (Sahoo et al., 2016). Droughts, storms, coastal flooding, increasing sea levels, tsunamis (Zhnag et al., 2022) and the melting of the Himalayan ice continue to plague the world. The world's sustainable way of life is in danger due to climate change, which forces both developed and developing nations including Nepal, to act quickly and jointly.

Green banking entails adopting environmentally friendly practices at every level, from internal banking processes to considering the environmental component of projects when funding the investing in commercial initiatives. As a result, green banking has risen to prominence in recent study as a means of improving a bank's environmental performance (Shaumya & Arulrajah, 2017). By introducing recycling programs, paperless banking, employing energy-efficient resources, and sponsoring community events, among other measures, banks can enhance their daily operations to lessen pollution. To guarantee the sustainability of their main business, they can also use loan and investment techniques to support ecologically conscious initiatives and create green products (Pariag-Maraye, et al., 2017). Making ensuring that organizational resources are used in a way that benefits society and the environment is the primary goal of green banking (Thombre, 2011). Nepalese commercial banks should also try to implement the concept of green banking as far as possible.

Green activities such as in-house decoration, online banking, solar energy, and net banking should be applied as green activities by banks to ensure environmental sustainability.

The use of solar energy instead of electric power, mobile banking and net banking are among the green activities that banks should engage in (Mulla & Nobanee, 2020). The concept of green banking has sparked the curiosity of many academics all over the world (Rai et al., 2019). However, it's a serious fact that the green banking is very new concept in Nepal, with little research done on it. Green banking is a part of the going green approach of operating financial institutions while considering clean natural issues and banks' corporate social responsibility (Tandukar et al., 2021). According to Tara et al. (2015), the primary goal of green banking is to guarantee customer service, finance, and the preservation of the management's internal environment by implementing and adhering to environmentally friendly banking policies.

GB is beneficial because it helps to promote banks' benevolence and brand image while highlighting their dedication to environmental preservation. By offering loans for green projects, GB promotes the growth of sustainable business models and lessens the harmful environmental effects associated with banking operations (Zhang et al., 2022). The environment related problems has been growing in Nepal rapidly in these days, so it could be the important topic for Nepalese researcher and practitioner.

LITERATURE REVIEW

Individual perceptions influence how people comprehend situations or occurrences; therefore, interpretations might vary from person to person and even from the objective reality (Gautam & Gautam., 2019). Despite its high adoption cost, the analysis showed that bankers view green banking as an environmental banking practice that contributed to environmental protection. Furthermore, because Islam upholds the values of social responsibility, ethics, cleanliness, and resource conservation; all of which are also the tenets of green banking. Green banking and Islamic banking were seen as complementary and interconnected (Masukujjaman at al., 2016). Sharma and Choubey (2022), has offered a conceptual model for GB activities and research, the effects of three green banking initiatives, including developing green products, practicing green CSR, and implementing green internal processes, on two potential conclusions, including green brand perception and green trust.

GB is a type of banking activity in which banks put in-house and external environmental sustainability into reality in society (Zhixia et al., 2018). According to Hasina and Afgan (2014), there are four logical reasons to choose green banking: corporate social responsibility, environmental considerations, economic rewards, and sustainability threats. According to Biswas (2011), adopting GB practices will improve both environment and operational

efficiencies. According to Tran and Ngugen (2017), a bank is considered green if it meets two requirements: first, it must offer green goods and services to its clients; second, it must develop a long-term business plan that complies with social responsibility and environmental protection standards. According to Tara et al. (2015), GB calls for prioritizing funding for industries that support various environmental protection initiatives. According to Meena (2013), green banking has four benefits: it lessens deforestation, raises customer and employee environmental consciousness, enjoys lower interest rates, and changes corporate activities to be more environmentally friendly.

The concept of green banking does not have long history in Nepal. One of the key components of green finance is digital banking. Digital banking is a comparatively recent occurrence in Nepal. In the early 1990s, Nabil Bank launched credit cards, ushering in the contemporary financial era in Nepal. Himalayan Bank introduced credit cards and ATM card for the national market in 1995. In 2002, Kumari Bank became the first bank in Nepal to offer online banking, or e-banking. Similar to this, Laxmi Bank introduced SMS Banking (Mobile Banking) in 2004 and was the first bank in the nation to do so (<https://blog.esewa.com.np>). Recently, most of financial institution of Nepal (Category A, B, C and D) have been practicing E-Banking (Internet Banking), Plastic Cards, Mobile banking, ATM and Point of Sale (Pos) Machine and Mobile Wallet (Digital Wallet) but some institution of Category 'D' are in the practice of mobile banking and ATM service to their clients (NRB, 2024). These types of activities also fostering the concept of green banking and can hope to assist the sustainable development goals.

The Nepal Rastra Bank (NRB) has focused digital banking and electronic payments in its monetary policy 2079/80. Similarly, the Nepal Government has committed to make the country digital through numerous efforts such as the growth of digital banking, the National Payment Gateway, online tax payment service, access the account to check balance, online trading of shares, transfer of funds from one customer's account to other and the implementation of the Digital Nepal Framework, among others, in the 2079/80 budget. The present rate of digital banking service usage is commendable (NRB, 2022).

By automating manual processes, providing service like 'balance inquiry', 'check balance statement,' 'fund transfer and deposit,' and 'opening and closing accounts via using online,' all of Nepal's banking and financial institutions are currently working to implement the 'green banking' concept in their operations. Additionally, these institutions are lending money at cheap interest rates for green projects and investing in 'green concepts' (Risal & Joshi, 2018).

After the Covid-19 pandemic, most of the activities of organizations are transformed manual to digital which heightens the commitment to environmental sustainability and ultimately fosters greening concepts in Nepal.

Even if the general idea of 'green banking' is not well understood in Nepal, people there concur that such initiatives are essential for future sustainable growth and environmental preservation. Regarding green banking in Nepal, the country's banks are not very active in advancing green banking initiatives and are somewhat out of step with international trends. Regarding 'green banking', not even the Central Bank of Nepal has developed any unique policies or plans. However, many banks in Nepal have begun to offer services that promote green banking practices, or the 'go green' concept. A 'Green Saving Account' which has been planting one tree for each account a customer creates with the bank, is another service that certain banks provide. In addition, practically all banks have been encouraging their staff to use as little paper as possible and to provide their clients online banking options. (Nepali Times, 2014). Most of the common tools related to green banking that are practiced by Nepalese banks are; paperless banking, energy consciousness, using mass transportation systems, green building, lending to environment-friendly projects, conservation and sustainable development, carbon credits. Excise duty exemption is provided for import of plants and machinery used in green energy projects and tax incentive is provided to electric vehicles as compared with fossil fuel run vehicles (NRB). Through the such evidence, it can be said that the green banking activities are given priority even in Nepal in these days.

Except for some guidelines connected to online transactions, Nepal Rastra Bank (NRB) has made no explicit provisions for green banking practices to date; however, this concept is causing controversy in Nepalese financial institutions. Banks in Nepal have not been especially active in supporting green banking projects, but in light of recent developments, some banks, including Civil Bank, Nepal Investment Bank, and Laxmi Bank, have begun to issue loans for solar energy and bicycles (Mehta & Sharma, 2016). Without the need for government approval, Nepalese banks have begun to promote green banking and green innovation initiatives to facilitate and foster innovative ideas of Nepalese youth concerning sustainable business that can also add value to the environment and reduce the negative impact of global warming, ultimately helping to achieve the environmental sustainability.

Many obstacles can be preventing the implementation of green banking in underdeveloped nations. To better understand different aspects of green banking uptake, the International Finance Corporation (IFC) surveyed in 25 developing nations. Based on the similarities in the majority

of the countries surveyed, The IFC (2015) identified several barriers to the adoption of green banking, including a lack of formal definition and measurement standards for green banking that are specific to a country's situation, a lack of knowledge among stakeholders about how to integrate green banking into current banking practices and operations, and a lack of awareness of the advantages of adopting green banking. Other issues facing developing nations include a lack of government support, trouble attracting customers to clean energy projects or emission reduction strategies, trouble immediately terminating loans to conventional high-pollution and emission industries like coal power plants or the oil industry, a lack of leaders or real-world examples in the field of green banking, a lack of understanding of the business case for green initiatives such as green building and green information technology, and higher adoption costs (Masukujjaman et al., 2016).

This research paper has sought to answer the question of; what are the mechanisms and status of green banking practices (GBP) in Nepalese commercial banks? What are the challenges/barriers of green banking practice in Nepalese commercial banks from the employees' angle?

Operational Activities and Green Banking Practices (OPA & GBP)

Green operations encompass all facets of product creation, consumption, handling, logistics, and waste management. Businesses are reevaluating their corporate strategy, including operations and business performance, in response to environmental protection and economic pressure on industry. Eco-friendly loans, eco-friendly processes and procedures, eco-friendly products, and eco-friendly services are just a few of the eco-friendly operating strategies that banks have used, according to a 2014 poll. Furthermore, it was discovered that poorly defined goals, a lack of infrastructure to support the initiatives, a lack of operating professional training and certification, and a lack of or ineffective enforcement and inspection procedures were among the difficulties banks faced when implementing green operations practices (Sheikh, 2014).

GB combines operational improvements, technological advancements, and shifting customer behavior in the banking industry. In a market that is becoming more and more competitive, it is a win-win situation for everyone to benefit. Adopting green banking practices will be advantageous for the environment as well as for increased operational effectiveness, a decreased susceptibility manual errors and fraud and cost savings in banking operations (Biswas, 2011). Green banking strategies have a significant and positive impact on a bank's overall environmental performance. Employee practices, daily operations practices, and

bank policy practices all had a significant and positive impact on the bank's environmental performance. Green banking techniques, it is believed, can help banks enhance their environmental performance (Shaumya & Arulrajah, 2017).

Employee Related Practice and Green Banking Practice (ERP & GBP)

Employee related green banking (ERP), according to Ones and Dilchert (2012), is a quantified individual activity that helps or hinders environmental sustainability goals at work. Paper recycling, double-sided printing, electricity savings, the use of energy-efficient equipment, and waste avoidance are all part of the ERP. In the area of ERP, numerous investigations have been carried out (Norton et al. 2015). Pro-environmental behaviors, also known as ecologically sustainable, environmentally friendly, or responsible environmental behaviors, are comparatively positive individual actions that improve the environment (Malsha et al., 2020).

In their study, Jha & Bhomme (2013) came to the following conclusions: banks should adopt environmental standards of lending in order to implement eco-friendly business practices; practices, which will improve the banks' asset quality; interest rates on loans given for green project should be relatively lower than the standard rate of interest; businesses can increase their profitability by recycling or reducing the amount of waste they generate; and businesses can adopt sustainable measures to go green in order to increase their profitability. According to Tandukar (2019), her study was the first to describe bankers' perspectives on green banking in the context of Nepal. Researcher defined GB as banking practices that place a high priority on social, ecological, and environmental considerations to protect the environment and natural resources. The researcher's study aims to determine bankers' general knowledge of green banking practices, identify bankers' perspectives on GB practices in their institutions, measure the factors influencing bankers' perspectives on GB practices, and suggest the necessary management approach for going green at the institution.

Customer Related Practice and Green Banking Practice (CRP & GBP)

A desk review conducted by Rai et al. (2019), aims to investigate customers' perceptions of green banking and to highlight rising concerns about GB initiatives. To examine the environmental perspective on GB, and to investigate the types of banking actions undertaken to safeguard the environment. To determine the elements that influence customer expectations and use of eco-friendly banking products, as well as the advantages of green banking practices for users, and concluded that the idea of GB has been recognized as one of the emerging issues in banking and financial institutions.

GB procedures can also boost client confidence and loyalty. According to a study conducted in 2019 by Ibe-enwo et al. GB has a beneficial impact on corporate reputation, which can then improve customer loyalty. Similar findings were made by Charles and Nairobi (2016), who discovered that green trust serves as a mediator between GB and customer loyalty. These results imply that GB practices can aid banks in luring and keeping clients by highlighting their dedication to sustainability of environment. As the demand for sustainable financial products and services rises, GB can also open doors to new markets and business opportunities (Bukhari et al., 2019).

Bank's Policy Related Practice and Green Banking Practice (BPP & GBP)

The commitment of top management is very vital for proper application of GB policy according to Rahman and Barua (2016). Green Banking is a distinct business philosophy that only addresses environmental issues and possibilities. It affects all facets of banking operations, necessitating specialized policy-making and implementation procedures. Several banking activities must be adopted, put into place, and restructured to support green banking. The implementation of GB is contingent on the existence of a positive relationship between corporate social responsibility and current issues and suggested that the bank take stakeholder concerns into account while establishing GB policy (Dewi & Dewi, 2017). To drive public and private financing towards green products, it is commonly recognized that governments developed clear rules and necessary regulations. These countries also provide an environment that inspires domestic financial institutions to increase their green investments (GIZ 2019). Although prudential authorities' actions vary in developed countries, methods to green banking policy interventions range between developing and developed nations (Park & Kim, 2020).

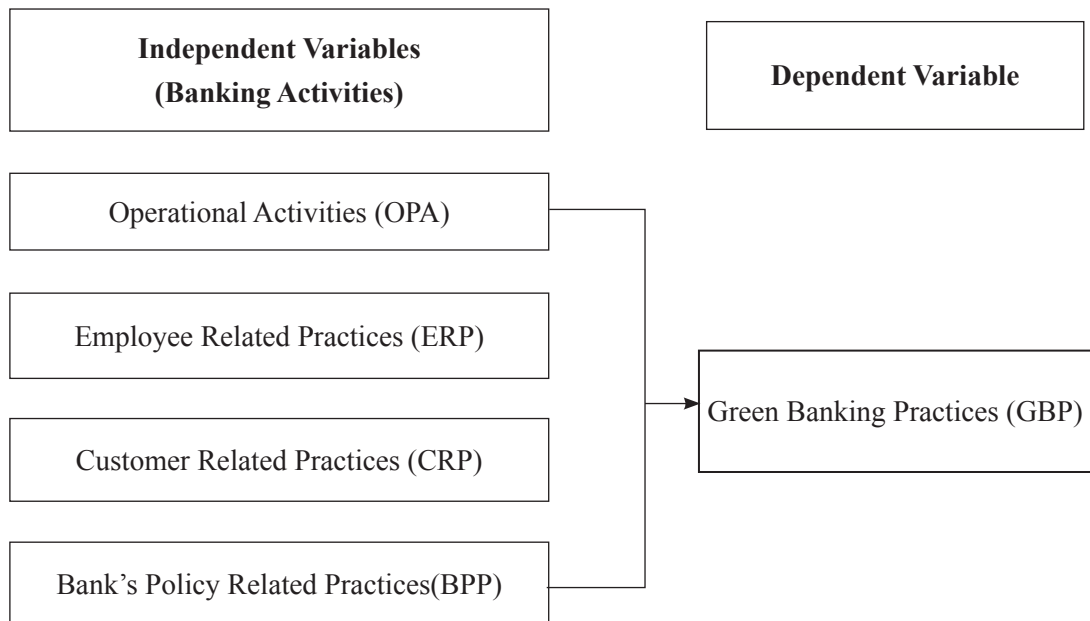
Nepal Rastra Bank has recently issued a guideline named 'Guideline on Environmental and Social Risk Management (ESRM) for Banks and Financial Institutions-2022' based on the experience from other countries because adaptation and adhering to sustainable finance principles and practices provides benefits to BFIs, their clients, the communities in which they operate and to the environment while contributing to the creation of a level playing field for the financial sector. In relation to the commercial operations of the BFI's customer, the guideline focuses on environmental, social, and climatic hazards that are becoming more and more important for Nepal. According to the guideline, all BFIs must develop and implement an environmental and social management system (ESMS) that complies with regional environmental and social laws and regulations as well as, over time, with accepted international standards like the Equator Principles and the IFC's Performance Standards on

Environmental and Social Sustainability. Furthermore, it describes the essential organizational responsibilities and roles built on the principles of integrating Environmental and Social risk management into the BFI's overall credit policy. The guideline has highlighted polluted wastewater (e.g., textile dyeing and tanning units), harmful smokes (e.g., brick kilns, metal re-rolling units), particulate air emissions (e.g., wood-burning), and land contamination from the use of chemical as environmental issues. At the same time, it also highlights climate-related issues in Nepal including landslides, drought, floods, epidemics, and fires and social issues which include employee safety, child labour, community health and safety, discrimination, and vulnerable populations.

The independent variables included in the study were banking operational activities, employee-related practices, and customer-related practices and bank's policy-related practice while the green banking practices of a commercial bank is treated as the dependent variable in this research paper.

Figure 1

Conceptual Framework



Following hypotheses have been created based on the literature review;

H1: There is a significant mean difference in practice of green banking between the groups of employees by the type of bank.

H2: There is a significant mean difference in the practice of GB between the groups of employees by gender.

H3: There is significant relationship between Operational activities (OPA), Employee related practices (ERP), Customer related practice (CRP), Bank’s policy related practice (BPP) and GB practices (GBP) in the sample banks.

MATERIALS AND METHODS

The philosophy for this research is aligns with positivism, which emphasizes objective measurement and statistical analysis. Positivism assumes that employees’ perceptions can be quantified and analyzed to identify patterns, relationships and generalizable findings. The empirical approach (survey study design) has been used to prepare this research paper. It has utilized a quantitative approach (descriptive) and causal research design (causal-comparative research design). The major source of data is primary and the quantitative nature of data was used for the survey questionnaire. All the commercial banks operating under the territory of Nepal are the universe of study. The multi-stage sampling design was used. Firstly, the three commercial banks were selected by following the lottery method and they are; Machhapuchhre Bank Limited (MBL), Nepal Bank Limited (NBL), and Nepal Investment Mega Bank Limited (NIMB). Secondly, the researcher has used the concept of Yamane (1967) to select the sample employees for the study. The glance of finite employee and sample size are as follows,

Table 1

List of universe and sample of study

Particulars	MBL	NBL	NIMB	Total	Sample Unit
Total Employee	1500+	2730	3200	7430+	390

Sources: HRD & websites of respected banks-2023

After the determination of sample units, the primary data was collected by distributing the questionnaire to the respondents and some questionnaires were distributed through online with the help of bank’s administration. Some of the survey questionnaire was collected by using ‘drop and collect’ approach. On request of researcher sample bank provided e-mail of their employees hence, online distribution was also done through e-mail and social networking sites. Additionally, the researcher uses respondents who are on the researcher’s messenger contact list and asks them to use the snowball method to forward the Google form to their friends who work in those sample banks.

Coding of data involves translating entries on the questionnaire to letters or numbers.

The data was coded and then processed to make recoding simple. After acquiring data through the dual method; face-to-face and through Google form, it is converted into an Excel file and later converted into an SPSS file. The strongly disagree is weighted as 1 and disagree as 2 and likewise neither disagree nor agree as 3 agree and strongly agree as 4 and 5 respectively.

A poll of 30 workers from sample banks was conducted as a general rule of thumb. Following the completion of the pilot survey, the methodology and questionnaire needed to boost reliability and validity. In addition, relevant statistical tests and commonly used measurement scales have been applied. For reliability, Cronbach's alpha was used. The Coefficient of Cronbach's alpha for all variables ranges from .884 to .933. It was computed to determine the internal consistency and reliability among the items within each variable. Normality test of major variables (OPA, ERP, CRP, BPP, GBP, and BGB) were done to determine whether the data collected were normally distributed or not. K-S, S-W tools, histogram, and Normal Q-Q plot were used for the determination of non-parametric and parametric data. Percentage, Frequencies, mean and standard deviations as descriptive analysis techniques were used to describe the samples (demographics) and general results. Pearson correlation and multiple regression analysis, ANOVA statistics with Independent Sample Test were used.

RESULTS AND DISCUSSION

The data gathered from the sample are shown in the table that follows, which is followed by a description of the data.

Table 2

Demographic Characteristics

N = 390

Characteristics	Category	Frequency	Percentage
Gender	Male	233	59.7
	Female	157	40.3
Age	28 and below	115	29.5
	29 to 38	205	52.6
	39 to 48	65	16.7
	Above 48	5	1.3
Job Position	Senior Manager	2	0.5
	Assistant Manager	57	14.6
	Officer	105	26.9
	Banking Assistant	184	47.2

Characteristics	Category	Frequency	Percentage
Experience	Banking Trainee	33	8.5
	Others	9	2.3
	Upto 5 years	170	43.6
	6 -10 years	122	31.3
	11-15 years	68	17.4
Name of Bank	Above 15 years	30	7.7
	NBL	130	33.3
	NIBL	140	35.9
	MBL	120	30.8
Location/Province	Gandaki	321	82.3
	Other	69	17.7
Department	Front of the house	176	45.1
	Back of the house	155	39.7
	Other	59	15.1
Awareness of GB	Yes	322	82.6
	No	68	17.4

Source: Survey, 2023

Of the total respondents majority of respondents were male (59.7%), age group of 29 to 38 were high (52.6%), majority of respondent (47.2%) were working as ‘banking assistant’, 43.6% had working experience of more than five years, most of the participants (82.3%) reported that they were working with in Gandaki Province, 45.1% respondents reported that they were involving in front of the house department of their institutions and majority of respondents (82.6%) were aware about the concept of GB concept.

To assess the mechanisms and status of green banking practices in Nepalese commercial banks the multiple-choice question was asked to the respondents. The basic forms of green banking practice were listed on the questionnaire. Knowingly and unknowingly, the employee response about the mechanisms of green banking practices in their banks. The frequency is high with Debit Cards with 380 and followed by Mobile Banking with 379. The lowest mode value is with ‘Use of solar energy’ and ‘E-waste Management’ and followed by ‘Green commercial building loans’ with 35, 44 and 45 respectively. It is concluded that the common type of green banking practices in Nepalese commercial banks in Nepal are; debit cards, mobile banking, credit cards, online/internet banking, electronic payments, electronic transfer, and (save paper

respectively. The results was supported by various study of Labor (1996), Ragupathi and Sujatha 2015), Burhanudin, Ronny and Sihotang (2019) and Mulla and Nobanee (2020).

Perception of Employees regarding Operating Activities: There were seven statements on the perception of employees regarding operating activities in the questionnaire. Out of which 'Our bank focuses on reduction of paper use' with the highest mean of that scale is 4.05 and followed by 'Our bank is conducting activities inside the banks to protect the environment (reducing carbon footprint from banking activities, online banking, paying bills online instead of mailing them, etc.)' with 3.98 scale of mean.

Perception of Employees regarding Employee-Related Practices: The five statements based on review were prepared on the questionnaire. ERP3 has the highest mean value of 3.41 which means that most of the respondents agree to the statement of 'All employees of my bank are sensitive towards the concept of green/ethical banking'. Second was ERP1 (My bank provides training and education to the staff on environmental protection, energy saving, etc.) with a mean value of 3.13 whereas the lowest mean value is with ERP2 (2.64) 'My bank implements an environmental/green reward system in the branches who support the green banking initiatives' with last rank of priority.

Perception of Employees regarding Customer Related Practice: CRP6 has the highest mean value of 4.19 which mean that most of the respondents agree to the statement of 'There is provision of online banking services (i.e, online bills payment, acceptance of remote deposit and provision of e-statements instead of paper statements).

Perception of Employees regarding Bank's Policy Related Practice: BPP8 has the highest mean value of 4.28 which means that most of the respondents agree to the statement of 'Our bank strictly follows the environmental guidelines of NRB'. Secondly, was 'My bank has policy to reduce paper use, reduce energy, policy of plantation for the preservation of environment' with 3.49 mean value.

Perception of Employees about the Green Banking Practices: GBP4 and GBP10 has the highest mean value of 4.30 and 4.25 respectively which means that most of the respondents agree to the statement of 'Use of internet banking in common for our bank' and 'On-line data sources are available about our bank'. Least priority given by the respondent is on GBP8 that is 'My bank uses e-waste management practices'.

Perception of Employees regarding Barriers/Challenges to adopt Green Banking: BGB7 has the highest mean value of 3.93 which means that most of the respondents believe that the major barrier for the practice of green banking is 'customers' insufficient awareness about the

importance of green/environmental banking services. The second important barrier according to employees is BGB6 that is ‘Lack of legal framework for supporting green banking concept.’ Apart from the benefits offered to banks, green banking faces numerous confronting challenges or barriers for the implementation in banking institution. According to the respondents’ perception from sample banks it is concluded that the ‘customers’ insufficient awareness about the importance of green/environmental banking services’ was considered the most challenging factor. Besides this the additional factors which hinders the practice of GB according to the employees are; ‘difficulties and complexity in assessing green projects, High cost, long pay back periods and high risks recorded with environment friendly projects, reducing bank competitiveness in short terms etc. The results of the study supported the finding of Tu and Dung (2017) because he has highlighted the some of the barriers of green banking practices as; the challenges of lower cash flow in short terms of green investment projects, low profit in short terms, higher operating costs, reputation costs, lack of formal guidelines on green banking, lack of reliable data on the environmental impact assessment of green investments/projects etc.

Association between independent and dependent variables

Table 3

Relationship between Dependent (GBP) and Independent variables

	GBP	OPA	ERP	CRP	BPP
GBP	1	.696**	.649**	.720**	.730**
OPA		1	.669**	.698**	.718**
ERP			1	.680**	.763**
CRP				1	.730**
BPP					1

***Correlation is significant at 1% level*

According to the output generated by SPSS-20, there is a significant relationship between GBP and OPA ($r = 0.696, p < 0.01$), GBP and ERP ($0.649, p < 0.01$), GBP and CRP ($0.720, p < 0.01$) and GBP and BPP ($r = 0.730, p < 0.01$). This result was supported by Mir and Bhat, (2022), Sahoo et al, (2016) Charles and Nairobi (2016) and Ones and Dilchert (2012). Regarding BPP the view of Park and Kim (2020) is differ as, although prudential authorities’ actions vary in developed countries, methods to green banking policy interventions range between developing and developed nations.

Table 4*Impact of Banking Activities on Green Banking Practices*

Model	Unstandardized		Standardized			Collinearity
	Coefficients		Coefficients			Statistics
	B	Std. Error	Beta	t	Sig.	VIF
1 (Constant)	8.315	1.180		7.048	.000	
OPA	.320	.067	.231	4.759	.000	2.468
ERP	.109	.080	.069	1.363	.174	2.705
CRP	.455	.076	.297	6.007	.000	2.572
BPP	.333	.063	.294	5.270	.000	3.272

R Square=.634, Adjusted R Square = .630, F statistic = 166.491, $p < 0.001$

SPSS Output based on Survey data

GBP= 8.315+.320 OPA+ .109 ERP+.333 BPP. The unstandardized B weight of OPA is .320 which means that operating activities of banks brings an increase 0.320 level of green banking practice scale after controlling the effect of other variables. The unstandardized B weight of ERP is .109, which means increase of single unit of employee related practices brings an increase of 0.109 point in practice of green banking in Nepalese commercial banks after controlling the effect of other variables.

The unstandardized B weight of CRP .455 which means increase of single unit of customer related practice of banks brings increase 0.455 point in the practice of green banking in commercial banks. Likewise unstandardized B weight of BPP .333, which means increase of a single unit of bank's policy-related practices brings increase 0.333 point in the practice of GB in commercial banks. The table 4 shows that the variance inflation factor (VIF) values all predictors are less than 5, indicating that there is no problem of multicollinearity in the model. *Hypothesis 1: There is a significant mean difference in practice of green banking between the groups of employee by the type of bank.*

To examine whether there is a statistically significant difference between the mean of overall practice of green banking across sample banks the one-way ANOVA was used and the result showed $F(2,387) = 0.298$ and $p = .742$ (i.e., $p > .05$) which means that the result is not significant. There is a significant mean difference in practice of green banking between the groups of employees by the name of bank was our hypothesis one (H1). This result is consistent with the findings of Biswas (2011), Sheikh (2014), Tandukar (2019), Redwanuzzaman (2020) and Tandukar, et al. (2021).

Table 5

One way ANOVA Statistics

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	25.750	2	12.875	.298	.742
Within Groups	16696.558	387	43.144		
Total	16722.308	389			

Hypothesis 2: There is a significant mean difference on green banking practice between the groups of employees in gender.

An independent samples t-test was performed to compare the mean difference in feeling of employee regarding practice of green banking practice in Nepalese commercial banks between male and female at 5% level of significance. There was no significant difference in mean employee perception regarding the practice of green banking between male (M=36.3004, SD=6.71494) and female (M=37.0828, SD=6.30625); |t (388) |, $\rho < 0.05$. Again about GBP and gender, same procedure has been adopted and conclude that there was no significant difference in mean employee perception regarding the practice of green banking between male (M=36.3004, SD=6.71494) and female (M=37.0828, SD=6.30625); |t (388) |, $\rho < 0.05$. The result is consistent with the finding of Vihai and Natarajan (2015). The result of Sahoo et al (2016) is little bit differ because the examined the relationship between age group and adaptation of GB product and concluded that the young generation is more inclined toward GB products than middle and senior age groups but the finding of this research is male and female do have same perception regarding GBP.

Table 6

GBP by gender

Employee by Gender	N	Mean	Std. Deviation
Male	233	36.3004	6.71494
Female	157	37.0828	6.30625

Table 7

Independent Sample Test-II

		F	Sig.	t	df	Sig. (2-tailed)
Overall GB practices	Equal variances assumed	0.532	0.466	-1.156	388	0.248
	Equal variance not assumed			-1.17	348.601	0.243

SPSS Output based on Survey data

CONCLUSIONS

It is concluded that the common type of green banking practices in Nepalese commercial banks in Nepal are; debit cards, mobile banking, credit cards, online/internet banking, electronic payments, electronic transfer, and save paper respectively. Based on hypothesis testing, there is not statistically significant difference between the overall practices of green banking among the sample banks. It can be concluded that the practice of GB is more or less similar among the sample banks. The dominating barriers/challenges for the implementation of green banking practices in Nepalese commercial banks are; 'customers insufficient awareness', difficulties and complexity in assessing green projects, high cost, low pay back period etc. Regarding hypothesis second there is lack of evidence of difference between gender and green banking practice in Nepal. It means that there is no effect of gender factor in the practice of green banking according to the respondents of sample banks. The conclusion of hypothesis third is that; there is significant positive relationship between Operational activities (OPA), Employee related practices (ERP), Customer related practice (CRP), Bank's policy related practice (BPP) with the green banking practices (GBP) of the sample banks. On the basis of SPSS output the four predictors together explain more than sixty three percent of variance in the practice of green banking practice.

IMPLICATIONS

The study has ramifications for a number of banking industry stakeholders, including academics, professionals, commercial banks, regulatory agencies, and clients. This study helps scholars better understand how banking operations affect the dedication to environmental sustainability and green banking practices. Additionally, this study helps banks who want to accomplish environmental goals and turn into greener banks. In Nepal, research in this field is nascent. First and foremost, this study aids other banks in understanding how their staff members view their dedication to environmental sustainability and the practice of green banking. Second, banks implementing the green banking concept can assess their own green practices and activities by comparing them to those of other green banks. Thirdly, the banking industry in Nepal is encouraged to adopt green banking practices employing this study. It aims to educate bank workers on green banking practices and the problems associated with their application. Fourthly, to safeguard the environment, bank management needs to do more to educate both customers and staff about green banking practices. Lastly, the management and conservation of the environment may benefit from this study.

Nepalese commercial banks do not receive adequate assistance from the apex body, the NRB, in terms of green banking practices. Nepalese commercial banks place a low priority on recycled items, energy-efficient investments, and biological energy, which could stymie better green banking practices. It may be urged to the Nepalese government that policies and measures encouraging the use of green banking practices to developed and implemented. Employees of banks have identified a lack of customer awareness programs on the green banking concept. Nepalese commercial banks must recognize their environmental and societal obligation to compete and survive in the global economy, as well as to protect the globe our 'Home'.

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