INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE & MANAGEMENT

IJRCM

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

Indexed & Listed at:

Ulrich's Periodicals Directory ©, ProQuest, U.S.A., Cabell's Directories of Publishing Opportunities, U.S.A., Google Scholar,
Indian Citation Index (ICI), J-Gage, India [link of the same is duly available at Inflibnet of University Grants Commission (U.G.C.)],
Index Copernicus Publishers Panel, Poland with IC Value of 5.09 (2012) & number of libraries all around the world.
Circulated all over the world & Google has verified that scholars of more than **7835 Cities** in **197 countries/territories** are visiting our journal on regular basis.
Ground Floor, Building No. 1041-C-1, Devi Bhawan Bazar, JAGADHRI – 135 003, Yamunanagar, Haryana, INDIA
http://ijrcm.org.in/

CONTENTS

CALL FOR MANUSCRIPTS

We invite unpublished novel, original, empirical and high quality research work pertaining to the recent developments & practices in the areas of Computer Science & Applications; Commerce; Business; Finance; Marketing; Human Resource Management; General Management; Banking; Economics; Tourism Administration & Management; Education; Law; Library & Information Science; Defence & Strategic Studies; Electronic Science; Corporate Governance; Industrial Relations; and emerging paradigms in allied subjects like Accounting; Accounting Information Systems; Accounting Theory & Practice; Auditing; Behavioral Accounting; Behavioral Economics; Corporate Finance; Cost Accounting; Econometrics; Economic Development; Economic History; Financial Institutions & Markets; Financial Services; Fiscal Policy; Government & Non Profit Accounting; Industrial Organization; International Economics & Trade; International Finance; Macro Economics; Micro Economics; Rural Economics; Co-operation; Demography: Development Planning; Development Studies; Applied Economics; Development Economics; Business Economics; Monetary Policy; Public Policy Economics; Real Estate; Regional Economics; Political Science; Continuing Education; Labour Welfare; Philosophy; Psychology; Sociology; Tax Accounting; Advertising & Promotion Management; Management Information Systems (MIS); Business Law; Public Responsibility & Ethics; Communication; Direct Marketing; E-Commerce; Global Business; Health Care Administration; Labour Relations & Human Resource Management; Marketing Research; Marketing Theory & Applications; Non-Profit Organizations; Office Administration/Management; Operations Research/Statistics; Organizational Behavior & Theory; Organizational Development; Production/Operations; International Relations; Human Rights & Duties; Public Administration; Population Studies; Purchasing/Materials Management; Retailing; Sales/Selling; Services; Small Business Entrepreneurship; Strategic Management Policy; Technology/Innovation; Tourism & Hospitality; Transportation Distribution; Algorithms; Artificial Intelligence; Compilers & Translation; Computer Aided Design (CAD); Computer Aided Manufacturing; Computer Graphics; Computer Organization & Architecture; Database Structures & Systems; Discrete Structures; Internet; Management Information Systems; Modeling & Simulation; Neural Systems/Neural Networks; Numerical Analysis/Scientific Computing; Object Oriented Programming; Operating Systems; Programming Languages; Robotics; Symbolic & Formal Logic; Web Design and emerging paradigms in allied subjects.

Anybody can submit the **soft copy** of unpublished novel; original; empirical and high quality **research work/manuscript** ***anytime*** in ***M.S. Word format*** after preparing the same as per our **GUIDELINES FOR SUBMISSION**; at our email address i.e. infoijrcm@gmail.com or online by clicking the link **online submission** as given on our website (***FOR ONLINE SUBMISSION, CLICK HERE***).

GUIDELINES FOR SUBMISSION OF MANUSCRIPT

1. **COVERING LETTER FOR SUBMISSION:**

DATED: _____________

THE EDITOR

IJRCM

Subject: **SUBMISSION OF MANUSCRIPT IN THE AREA OF** ____.

(e.g. Finance/Mkt./HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, please specify)

DEAR SIR/MADAM

Please find my submission of manuscript titled '____' for likely publication in one of your journals.

I hereby affirm that the contents of this manuscript are original. Furthermore, it has neither been published anywhere in any language fully or partly, nor it is under review for publication elsewhere.

I affirm that all the co-authors of this manuscript have seen the submitted version of the manuscript and have agreed to inclusion of their names as co-authors.

Also, if my/our manuscript is accepted, I agree to comply with the formalities as given on the website of the journal. The Journal has discretion to publish our contribution in any of its journals.

NAME OF CORRESPONDING AUTHOR	:
Designation/Post*	:
Institution/College/University with full address & Pin Code	:
Residential address with Pin Code	:
Mobile Number (s) with country ISD code	:
Is WhatsApp or Viber active on your above noted Mobile Number (Yes/No)	:
Landline Number (s) with country ISD code	:
E-mail Address	:
Alternate E-mail Address	:
Nationality	:

* i.e. Alumnus (Male Alumni), Alumna (Female Alumni), Student, Research Scholar (M. Phil), Research Scholar (Ph. D.), JRF, Research Assistant, Assistant Lecturer, Lecturer, Senior Lecturer, Junior Assistant Professor, Assistant Professor, Senior Assistant Professor, Co-ordinator, Reader, Associate Professor, Professor, Head, Vice-Principal, Dy. Director, Principal, Director, Dean, President, Vice Chancellor, Industry Designation **etc**. ***The qualification of author is not acceptable for the purpose***.

NOTES:

a) The whole manuscript has to be in ***ONE MS WORD FILE*** only, which will start from the covering letter, inside the manuscript. ***pdf. version** is liable to be rejected without any consideration*.

b) The sender is required to mention the following in the **SUBJECT COLUMN of the mail**:

New Manuscript for Review in the area of (e.g. Finance/Marketing/HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, please specify)

c) There is no need to give any text in the body of the mail, except the cases where the author wishes to give any **specific message** w.r.t. to the manuscript.

d) The total size of the file containing the manuscript is expected to be below **1000 KB**.

e) Only the **Abstract will not be considered for review** and the author is required to submit the **complete manuscript** in the first instance.

f) ***The journal gives acknowledgement w.r.t. the receipt of every email within twenty-four hours*** and in case of non-receipt of acknowledgment from the journal, w.r.t. the submission of the manuscript, within two days of its submission, the corresponding author is required to demand for the same by sending a separate mail to the journal.

g) The author (s) name or details should not appear anywhere on the body of the manuscript, except on the covering letter and the cover page of the manuscript, in the manner as mentioned in the guidelines.

2. **MANUSCRIPT TITLE:** The title of the paper should be typed in **bold letters**, **centered** and **fully capitalised**.
3. **AUTHOR NAME (S) & AFFILIATIONS:** Author (s) **name**, **designation**, **affiliation** (s), **address**, **mobile/landline number** (s), and **email/alternate email address** should be given underneath the title.
4. **ACKNOWLEDGMENTS:** Acknowledgements can be given to reviewers, guides, funding institutions, etc., if any.
5. **ABSTRACT:** Abstract should be in **fully Italic printing**, ranging between **150** to **300 words**. The abstract must be informative and elucidating the background, aims, methods, results & conclusion in a **SINGLE PARA**. ***Abbreviations must be mentioned in full***.
6. **KEYWORDS:** Abstract must be followed by a list of keywords, subject to the maximum of **five**. These should be arranged in alphabetic order separated by commas and full stop at the end. All words of the keywords, including the first one should be in small letters, except special words e.g. name of the Countries, abbreviations etc.
7. **JEL CODE:** Provide the appropriate Journal of Economic Literature Classification System code (s). JEL codes are available at www.aeaweb.org/econlit/jelCodes.php. However, mentioning of JEL Code is not mandatory.
8. **MANUSCRIPT:** Manuscript must be in ***BRITISH ENGLISH*** prepared on a standard A4 size ***PORTRAIT SETTING PAPER***. *It should be free from any errors i.e.* ***grammatical, spelling** or **punctuation.*** *It must be thoroughly edited at your end*.
9. **HEADINGS:** All the headings must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.
10. **SUB-HEADINGS:** All the sub-headings must be bold-faced, aligned left and fully capitalised.
11. **MAIN TEXT:**

THE MAIN TEXT SHOULD FOLLOW THE FOLLOWING SEQUENCE:

INTRODUCTION
REVIEW OF LITERATURE
NEED/IMPORTANCE OF THE STUDY
STATEMENT OF THE PROBLEM
OBJECTIVES
HYPOTHESIS (ES)
RESEARCH METHODOLOGY
RESULTS & DISCUSSION
FINDINGS
RECOMMENDATIONS/SUGGESTIONS
CONCLUSIONS
LIMITATIONS
SCOPE FOR FURTHER RESEARCH
REFERENCES
APPENDIX/ANNEXURE

The manuscript should preferably be in ***2000 to 5000 WORDS***, But the limits can vary depending on the nature of the manuscript.

12. **FIGURES & TABLES:** These should be simple, crystal **CLEAR**, **centered**, **separately numbered** & self-explained, and the **titles must be above the table/figure**. **Sources of data should be mentioned below the table/figure**. *It should be ensured that the tables/figures are referred to from the main text*.

13. **EQUATIONS/FORMULAE:** These should be consecutively numbered in parenthesis, left aligned with equation/formulae number placed at the right. The equation editor provided with standard versions of Microsoft Word may be utilised. If any other equation editor is utilised, author must confirm that these equations may be viewed and edited in versions of Microsoft Office that does not have the editor.

14. **ACRONYMS:** These should not be used in the abstract. The use of acronyms is elsewhere is acceptable. Acronyms should be defined on its first use in each section e.g. Reserve Bank of India (RBI). Acronyms should be redefined on first use in subsequent sections.

15. **REFERENCES:** The list of all references should be alphabetically arranged. ***The author (s) should mention only the actually utilised references in the preparation of manuscript*** and they may follow Harvard Style of Referencing. **Also check to ensure that everything that you are including in the reference section is duly cited in the paper**. The author (s) are supposed to follow the references as per the following:

- All works cited in the text (including sources for tables and figures) should be listed alphabetically.
- Use (**ed.**) for one editor, and (**ed.s)** for multiple editors.
- When listing two or more works by one author, use --- (20xx), such as after Kohl (1997), use --- (2001), etc., in chronologically ascending order.
- Indicate (opening and closing) page numbers for articles in journals and for chapters in books.
- The title of books and journals should be in italic printing. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.
- For titles in a language other than English, provide an English translation in parenthesis.
- ***Headers, footers, endnotes** and **footnotes** should **not be used** in the document.* However, **you can mention short notes to elucidate some specific point**, which may be placed in number orders before the references.

PLEASE USE THE FOLLOWING FOR STYLE AND PUNCTUATION IN REFERENCES:

BOOKS

- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–23

UNPUBLISHED DISSERTATIONS

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

ONLINE RESOURCES

- Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

WEBSITES

- Garg, Bhavet (2011): Towards a New Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

CONTRIBUTIONS OF RESILIENT EMPLOYEES IN BUILDING SUSTAINABLE HIGH PERFORMANCE IN ORGANIZATIONS

PRIYANKA PRIYADARSHINI
ASST. PROFESSOR & HEAD OF THE DEPARTMENT OF MANAGEMENT
SYNERGY INSTITUTE OF TECHNOLOGY
BHIMPUR, PHULNAKHRA, BHUBANESWAR

ABSTRACT
Organizational Resilience is the firm's ability to effectively absorb drastic changes in business environment, develop situation-specific responses and ultimately engage in transformative activities to capitalize on disruptive surprises that potentially threaten organization's survival. Building sustainable high performance in organizations require a resilient workforce competent to manage challenges through a compelling vision, dynamic leadership, and well-designed business strategy in an increasingly volatile, complex, and uncertain business world. Performing Employees with the Right Knowledge, Skill-set, Attitude and Behavior are the source of competitive advantage on whom organizations should invest to achieve the objective of increased organizational productivity. This Paper examines the different Human Resource Management Strategies to develop resilience in employees and makes an assessment of the contributions of resilient employees in building sustainable high performance in organizations. An exploratory and descriptive study was conducted with the help of secondary data analysis on relevant Literature about organizational resilience and Human Resource Management practices. The study reveals that Human Resource skills adjustment, building strong workplace culture, Organizational Development Interventions, implementing High-Performance Work Systems and organizational leadership are the human resource management strategies to develop resilience in employees. Increased employee productivity, employee engagement, strong organizational culture, workforce diversity management, creation of innovative and problem-solving teams and globalization of business are the contributions of resilient employees in building sustainable high performance in organizations. The study suggests that a sustainable practice that create and optimally utilize the knowledge, skills and capacities of employees facilitates the development of a resilient organization.

KEYWORDS
organizational resilience, organizational development interventions, employee engagement, competitive advantage.

JEL CODES
M12, M14.

1. INTRODUCTION
Organizations today encounter numerous challenges when functioning in a complicated business environment, placing employees in stressful work situation which is affecting their health. Here the role of Human Resource (HR) Manager is very crucial in providing a stress free and healthy work environment with full management and technical support to help them become resilient. Companies operate in a dynamic and competitive business environment which requires managers to proactively deal with them to consistently earn profits. Denyer (2017) defines Organizational Resilience as "The ability of an organization to anticipate, prepare for, respond and adapt to incremental change and sudden disruptions in order to survive and prosper". The potential for resilience within an organization can be increased by employing human resource management techniques which creates the ability to respond decisively to disruptions, changes, or shocks business environment gives. The Human Resource Departments are now focusing on resilience planning by improving knowledge, skills and competencies which infuse resilience within the workforce to mitigate the risk threatening the organization's survival. In this context the present paper aims to understand the role of Human Resource Management Strategies in developing resilient employees and evaluates the contributions of such employees in building sustainable high performance in companies today.

2. REVIEW OF LITERATURE
2.1. CONCEPT OF ORGANIZATIONAL RESILIENCE
In the view of McManus et al. (2008**)** the word "Resilience" originated from the field of science which describes the nature of a substance that has the capacity to return to its original form after undergoing a drastic physical or chemical change. Understanding the issue, managing the organization's limitations and having the ability to change are the three primary characteristics of a resilient organization (McManus et al. 2008). As a result, they viewed organizational resilience as a function of an organization's total situational awareness, its capacity to manage key vulnerabilities, capacity for adaptation and capacity for recovery. Organizational preparedness can be measured by how well they are able to absorb shock or build resilience in the face of anxiety and mental uneasiness employees go through due to these unprepared changes. In the context of organizations, Lengnick-Hall et al. (2011) defines the term Organizational Resilience as "The Capacity of an organization to respond in a manner that suited the situation and to make changes to reduce the impact of any surprises that may threaten the company existence." Companies adopt a variety of strategies to deal with uncertainty, including centralized control mechanisms, creative solutions, and new system adaptation.

Managers must be aware of the increasingly complex cultural, political, legal, regulatory, economic, technological environment in which they work and must keep an eye on important issues and trends that could have an impact on the organization's goals, performance as well as the perceptions and values of external stakeholders. Organizational performance is the effective and efficient use of resources by a firm for the accomplishment of its objectives, leading to an increase in profitability, share price, sales, and market share as well as successfully satisfying the expectations of its three main stakeholders, which include customers, employees and its owners.

2.2. HUMAN RESOURCE MANAGEMENT'S ROLE IN DEVELOPING CAPACITY FOR ORGANIZATIONAL RESILIENCE
Schuler & Jackson (1987) prepared a list of Human Resource Management (HRM) procedures which included decisions for planning, staffing, evaluating, compensating, as well as training and development. Job enrichment (planning), socialization (staffing), employee participation (appraising), employment security (compensating), and quality of work life emphasis (training and development) are formal HRM practices. Fottler (2002) emphasized that when companies use Strategic Human Resource Management (SHRM) techniques, organizational resilience is increased. According to Lengnick-Hall (2011) organizational sustainability is regarded as the most significant matter of concern for organizations which requires managers to put into practice strategic human resource management techniques which increases employee performance.

2.2.1. ORGANIZATIONAL CHANGE AND ORGANIZATIONAL DEVELOPMENT INTERVENTIONS
According to Aswathappa (2012) "Organizational Change is the process by which organizations move from their present state to some desired future state to increase their effectiveness." In order to sustain in this rapidly changing dynamic business environment, organizations have to undergo change and implement it in their working system and culture. Employees are the change targets as well as the change agents who can implement the change in the company. Emotionally strong, adaptable, broad minded, knowledgeable, skilled, and performing employees with the right attitude are the ones who can lead the organizational change process and implement it using the Organizational Development (OD) interventions. Organizational Development is a set of organizational change methods, planned and systematic process to create adaptive organizations, capable of transforming and reinvesting themselves, so as to remain effective.

There are four categories of OD Interventions:

1 Human Process Interventions
- Sensitivity or T Group Training
- Team Building
- Grid Training

2 Human Resource Management Interventions
- Recruitment and Selection
- Performance Appraisal
- Reward System
- Workforce Diversity Programmes

3 Techno Structural Interventions
- Total Quality Management and
- Quality of Work Life Programmes for Employees

4 Strategic Interventions
- SWOT Analysis
- Modification of Vision and Mission of company
- Designing a Strategic Change Plan and its Implementation with the full support of all

Employees and Top Management

2.2.2. ORGANIZATIONAL LEARNING

Organizational Learning is the process where all the employees learn and apply new knowledge, behaviours, skills, values and also include management of critical data to arrive at the best decisions for the company. According to Aggestam (2006) a learning organization has a culture that encourages both individual and organizational learning and innovation. A leader who embodies the learning organization's vision, is necessary for the first step in creating one. It is always desirable that both employees and organizations learn new developments in the business environment and together become resilient.

2.2.3 ADAPTIVE CAPACITY

Walker et al. (2002**)** define Adaptive Capacity as "An aspect of resilience that reflects learning, flexibility to experiment and adopt novel solutions, and the development of generalized responses to broad classes of challenges." They further define adaptive capacity as being related to effective leadership and a culture that fosters open communication, positive working relationships, and an organizational goal that is shared by all members. McManus (2007) in her Relative Overall Resilience (ROR) Model provided the following Resilience Strategies

- Communications and Relationships
- Strategic Vision and Outcome Expectancy
- Information and Knowledge Management
- Leadership, Management and Governance Structures

2.2.4. DYNAMIC CAPABILITIES

According to Teece, et al. (2010) " Dynamic Capabilities. is the firm's ability to integrate, build, and reconfigure internal and external skills to handle quickly changing contexts". Organizations and their staff members require the capacity to learn new skills rapidly and develop strategic assets. The company must integrate new resources including capability, technology, and customer feedback while reconfiguring its current strategic assets. He underlined the significance of corporate agility for the survival of businesses. It is the ability to recognize and respond to threats, to seize opportunities, and to sustain competitiveness by maximizing, merging, safeguarding, and, if required, reconfiguring the intangible and tangible assets of the corporate firm.

3. IMPORTANCE OF THE STUDY

The speed and pace with which firms are facing global business transformations, they need to invest on training of their employees on an urgent basis to avoid technological obsolesce. Employees swiftly take on new roles and use their abilities to make significant changes during shocks like economic recessions, fast shifting markets, and pandemics. All of these situations reveal the importance of employee resilience, which facilitates the sustainable high performance in the firm. Organizations that design their Human Resource Management Strategies provide ample opportunities to employees to adapt skills and develop capacity in new areas of knowledge and to build the collective resilience required to respond proactively to adversity.

4. STATEMENT OF THE PROBLEM

Employee-friendly practices implemented by Management assists employees in maintaining their physical and mental well-being, which enables them to handle a variety of unforeseen business threats and makes them resilient and productive workforce. Resilient Employees stand as strong pillars for organizations, ready to face any kind of unpredictable business transformations. The present paper aims to assess the contributions of resilient employees in building sustainable high performance in Organizations.

5. OBJECTIVES OF THE STUDY

1. To Study the Importance of Human Resource Management in Developing Organizational Resilience.
2. To Study the Human Resource Management Strategies to Develop Resilience in Employees.
3. To Assess the Contributions of Resilient Employees in Building Sustainable High Performance in Organizations.

6. RESEARCH METHODOLOGY

An Exploratory and Descriptive Study was conducted with the help of Secondary Data Analysis of Relevant Literature, Websites and Research Articles on Organizational Resilience and Human Resource Management Practices.

7. RESULTS AND DISCUSSIONS

7.1. IMPORTANCE OF HUMAN RESOURCE MANAGEMENT IN DEVELOPING ORGANIZATIONAL RESILIENCE

- The HRM System that keeps the employees aligned to Corporate Vision and Mission in the continuously changing environment leads to organizational resilience building. Strategic Human Resources Management Practices are long term interventions, every organization must implement like management training, employee participation, organizational learning and effective leadership, performance-oriented appraisal, planning career opportunities, and developing adaptive capacities to make employees resilient.
- Well-designed HR Strategies will not only assist in promoting employee resilience and enhancing performance outcomes, but they will also help to build and sustain organizational values of fulfilling customer expectations and Corporate Social Responsibility. Employee Friendly Policies implemented by Human Resource Executive helps employees maintain their physical and mental health which makes employees face any kind of unpredictable business challenges making them resilient and effective performers in organizations.
- The phenomenon of SHRM practices involves adopting a set of critical human resource practices that improves employees' Knowledge, Skills, and Abilities (KSAs) helping organizations to achieve sustainable performance, which in turn generates revenue for the firm.

- According to the Firm's Resource-Based View (RBV) employees are the intangible resources of an organization, that are valued, uncommon, difficult to duplicate, and non-substitutable who contribute to organizational stability and long-term survival. Employees are the core of "Intellectual Capital" described as the reservoir of Knowledge, Skills, and Abilities necessary to achieve profitability. Strategic HRM help employees become more resilient by improving their knowledge and skills inspiring them to contribute to the competitiveness and sustainability of the company, particularly during times of crisis.

7.2. HUMAN RESOURCE MANAGEMENT STRATEGIES TO DEVELOP RESILIENCE IN EMPLOYEES

Skilled and performing employees are the contributing factor for improving organizational performance and effectiveness, helping organizations to become resilient. Following are the strategies to be implemented to develop organizational resilience in employees.

7.2.1. WORKFORCE PLANNING AND HIRING OF EMPLOYEES

When an organization makes the Workforce Planning, it should first decide the type of employees each department needs having the right kind of work attitude – readiness to learn new methods, adaptability, flexibility, team spirit, open mindedness, emotional stability and physical strength, and recruit them accordingly. This ensures entry of the resilient employees in the beginning itself, helping organizations to face any kind of adversities and business challenges, which indicates Strategic Human Resources Planning and Right Selection of employees in all organizations.

7.2.2. TRAINING AND DEVELOPMENT OF EMPLOYEES

Developing resilience in employees is not a one-day task, but requires continuous efforts on part of the Management by providing behavioral training as the first step towards resilience building. Employees always prefer to work in comfort zone and will resist any kind of changes affecting their working style and relationship. Developing resilience first requires coming out of the comfort zone and accepting the changes in business environment learn the new methods of work and implement the changes throughout the organization. Making employees realize the importance of developing resilience requires the Human Resource Manager to orient and train all the employees in this regard through behavioral, conceptual and skill training sessions. Only training programmes will not suffice the efforts, but, mentoring, counseling, guidance and psychological support along with technical support will make the process of resilient building in employees much easier and faster.

7.2.3. HUMAN RESOURCE SKILLS ADJUSTMENT

When the Corona Virus outbreak spread over the world, several firms turned to downsizing as a survival strategy rather than Re- Skilling and upgrading their employees to accommodate the new drastic developments brought about by the pandemic. It would have been more appropriate for them to provide new training to employees as the key to sustainability in times of uncertainty, disruptions, economic dislocations, and transformation in technological tools caused by the covid-19 pandemic. Managers can use Up-Skilling and Re-Skilling as two Human Resource Skills Adjustment (HRSA) Dimensions in the workplace. Re- skilling is the process of retraining employees to assist them in adjusting to a new role that they have never held before. Up-Skilling is the process of teaching employees' new competencies; skills, abilities, and knowledge that they require to accomplish their current job. Retraining means learning a completely new (fresh) skill to execute a job that is different from the one the person was doing previously.

7.2.4. BUILD STRONG WORKPLACE CULTURE

HR Managers are required to provide a wide-range of resilience training programmes to enhance the workforce skills in technical, time management, communication, decision making and stress management. HR Managers are required to build an interactive organizational culture with strong, consistent, open communication system to spread the teamwork spirit. A Spiritual Culture recognizes that employees have both a mind and a spirit which seeks to find meaning and purpose in their work and desire to connect with other employees and be an integral part of the company with the vision of product excellence and commitment to customer's needs. Companies can organize yoga training sessions on regular basis before official working hours for employees to help them focus and be stress free while working thus leading to their physical as well as emotional health.

7.2.5. HIGH-PERFORMANCE WORK SYSTEMS (HPWS)

High-Performance Work Systems (HPWS) are intended to improve employees' knowledge, abilities, dedication and behaviour in such a way that they become a source of competitive advantage. HPWS are a collection of HR Practices that support flexible work arrangements and skill diversity, such as selective staffing, investment in training and development, performance-based reward systems, employee involvement, teamwork, and employee-oriented job design.

7.2.6. ROLE OF ORGANIZATIONAL LEADERSHIP

Leadership is a crucial Management Function that helps to bring about the desired change, motivate employee to perform, foster team spirit and create Future Leaders, and encourage a learning culture. Building organizational resilience requires an effective and strong situational leadership from the Managers who can instill the spirit of resilience in all the employees to face any challenge.

7.3. CONTRIBUTIONS OF RESILIENT EMPLOYEES IN BUILDING SUSTAINABLE HIGH PERFORMANCE IN ORGANIZATIONS

In a Corporate environment that is becoming more unpredictable, complicated, and uncertain, organizational resilience is recognized as a crucial component for an organization's success. As resilient employees play a key role in ensuring the survival and the effective functioning of the organization in this extremely competitive environment, nurturing the employees' performance generates many favorable outcomes for the organization. Following are the contributions of resilient employees in building sustainable high performance in organizations.

INCREASED PROFITABILITY AND MARKET SHARE

The primary objective of every business venture is profitability which helps organizations to survive in the long run. Companies that invest on appropriate training of their employees and makes them resilient, ensures long term profitability for sustainable growth and development. Resilient, performing and committed employees will definitely contribute to both increasing profitability and market share for the company.

EMPLOYEE ENGAGEMENT AND PARTICIPATION

Employees not only show attitude by how well or how poorly they do their job, but also by how engaged they are with the company. Employee Engagement is the degree to which an employee is connected to all aspects of the company and works to help the organization. Resilient employees not only show commitment towards their work, but are also aware of the happenings in the workplace and are always connected, actively involved in company affairs and issues. They always come forward to help the company in solving any critical issue taking initiative on their own. This attitude of employees helps organizations to solve complex problems easily and correct decisions is taken in time with effective leadership.

INCREASED EMPLOYEE PRODUCTIVITY AND TEAM EFFECTIVENESS

Happy, confident and performing employees contribute to increased employee productivity and organizational profitability. Emotionally strong employees excel in all kinds of tasks and exhibit leadership capabilities required to handle all kinds of complex projects. Resilient employees are very efficient in controlling their own emotions and controlling the behavior and performance of their team members. They are very good in negotiation skills and can turn obstacles into opportunity through their calm, going with the flow and flexible approach and effective communication skills while dealing with tough and rigid people inside and outside the organization. They know which leadership style to apply according to the situation which increases team effectiveness and performance.

DEVELOPING STRONG ORGANIZATIONAL CULTURE

Resilient employees help in building a strong and healthy workplace culture which is evident in the attitude and behavior of all the employees. Commitment towards work and working on customer needs and expectations without delay, disciplined workforce, employee showing ethical behavior, upholding and practicing values, morals and principles, energetic and enthusiastic employees taking responsibilities and being accountable for their work are some of the signs of strong and healthy organizational culture which is possible when all employees are resilient.

WORKFORCE DIVERSITY MANAGEMENT

Organizations today recruit and select employees from diverse social, economic political, cultural, educational backgrounds with different mindset, attitudes, personality traits, perception and outlook which are now a big challenge for Human Resource Manager to handle effectively. New employees enter a company with their own set of expectations and anxiety and it is the duty of the HR Manager to remove that fear and anxiety by providing them a stress free work environment where there is always scope for improvement, encouragement and active support from supervisor and peers and Management in carrying out day today functions. This reduces their anxiety to a great extent and helps them accept the new company culture with open heart. Encouraging participation from all employees irrespective of their background helps manage workforce diversity much better. When a company is successful in handling diverse workforce by empowering them in all aspects, it makes the employees and the organization resilient and always ready to face any kind of business challenge. Diverse workforce has the potential to contribute multi-faceted skills, knowledge, competencies which are required today to remain competitive.

MODERN TECHNOLOGY AND DIGITALIZATION

Resilient workforce is always agile, active, and flexible with a learning attitude to adapt to any technological changes to be implemented in company. They never resist change but accept it with a "Let's Do It Attitude "and become the Change Agent to implement the new technology in the whole organization with effective leadership. Business environment is unpredictable and technology working today can become obsolete tomorrow, so business leaders need resilient workforce to implement the new change at a fastest rate to retain their present customers because using obsolete technology has direct impact on product quality which today's customers will never accept.

CREATING INNOVATIVE TEAMS AND PROBLEM-SOLVING TEAMS

Resilient employees are innovative and good in problem solving and decision making in turbulent times. They are broad minded, aware of their immediate surroundings, flexible with a "We Can Do" Approach. Resilient employees have the ability to solve any problem with unconventional way and never fear to try new methods of doing things. This quality should be used by HR Managers to include them in Quality Circle Teams, Total Quality Management Teams, New Product Development Teams and Problem-Solving Teams where they can suggest unique methods to solve any complex issues.

GLOBALIZATION OF BUSINESS

Twenty First century Business Leaders cannot survive in this globalized business environment if they don't have a resilient workforce to work with. A resilient workforce is strength for all companies today who can handle foreign clients and business efficiently and finalize business deals in less time with their negotiation skills and business acumen. An organization having resilient employees will always be ready to send their employees to foreign assignments because they know their employees can handle any situations abroad and complete the assignment successfully.

STRATEGY FORMULATION

Resilient employees are good in strategy formulations as they are strong in market intelligence, always up to date with latest business changes and competitors move, their strength and weakness. They are open minded, always in a learning mode and ready to accept changes so they can develop business strategy which is flexible enough to allow changes to be incorporated when need arises. This is fundamental to sustainable high performance in organization. They design and implement business strategy to offer best quality goods and services to their customers at the best price.

INCREASED CUSTOMER FOOTFALL AND ENHANCED CORPORATE IMAGE IN THE MARKET

Providing best quality goods and services to the customers at the best price, committed after sales service, excellent customer service and modifying the products as per feedback given by customers immediately by employees, ensures increased customer footfall and loyalty and enhanced corporate image in the market.

SUPPORT FROM STAKEHOLDERS OF THE COMPANY

Committed, well trained, well-mannered professional employees are in high demand today all over the world. Investors, suppliers, creditors, Banks and the Government all expect a resilient Workforce in a company which can withstand any challenge, adversity and also be committed in their working relationship with them, fulfilling all formalities and obligations. The company which is successful in doing so due to its employees always gets the full support of its stakeholders in times of need.

BUILDING COMPETITIVE ADVANTAGE

Human Resources are the living assets of a company and the reservoir of knowledge, skills and talent which has to be utilized in an efficient way to increase the organizational productivity. Performing employees with the right knowledge, right attitude and right behavior having a vision and commitment to excel, is the competitive advantage all organizations are searching for, but very hard to find. Resilient employees are the new source of competitive advantage for all companies today standing as the strongest pillar of support in the face of adversities and upcoming business challenges.

8. FINDINGS

- Surviving in a service driven economy requires employees to be agile, proactive and responsive to business transformations and always possess a customer centric approach to satisfy their customers with their best product in the market. Only a Human Resource Manager can make it possible by developing its employees to manage and satisfy their customers in highly competitive business environment.
- Workforce Planning and Hiring of employees, Human Resource Skills Adjustment, Building Strong Workplace Culture, Training and Development of employees, Organizational Learning, Organizational Development Interventions, Developing Adaptive Capacity and Dynamic Capabilities, Implementing High-Performance Work Systems (HPWS), and Organizational Leadership are the Human Resource Management Strategies to develop Resilience in Employees.
- Increased profitability, employee engagement and participation, increased employee productivity and team effectiveness, developing strong organizational culture, workforce diversity management, modern technology and digitalization, creation of innovative and problem solving teams, globalization of business, strategy formulation, increased customer footfall and enhanced corporate image, support from stakeholders of the company, and building competitive advantage are the contributions of resilient employees in building sustainable high performance in organizations.

9. SUGGESTIONS

Organizations need to shift the focus on developing capabilities first and then skills. In organizations where capabilities are cultivated and nurtured first, employees can Re- Skill and reinvent quickly. In the turbulent environment, firms must create Performance Management System that rewards employees and motivates them to continuously learn, adapt, and improve. The rewards can be based on capability development, rather than solely on work output. To promote a spirit of cooperation, HR Managers must create an engaging company culture with effective communication system across the organization.

10. CONCLUSION

The Human Resource Management System that keeps the employee's talents aligned to its dynamic Corporate Strategy contributes to organizational resilience development. Strategic Human Resource Management System that successfully manages the talent and competencies of employees is the most integral element for developing a resilient organization to achieve a sustainable competitive advantage. The Study highlights the important role of Human Resource Manager and their employees in successfully implementing the Resilience Building Techniques to achieve Sustainable High Performance in organizations.

REFERENCES

1. Aggestam, L. (2006), "Learning Organization or Knowledge Management- Which comes first, the chicken or the egg?" *Information Technology and Control Journal*, Vol. 35, No. 3A, School of Humanities and Informatics, University of Skoevde. Sweden.
2. Al-Ayed,S. I. (2019), "The impact of strategic human resource management on organizational resilience: an empirical study on hospitals", *Verslas: TeorijaIr Praktika / business: theory and practice*, pp. 179–186, https://doi.org/10.3846/btp.2019.17.
3. Aswathappa, K. (2012), "Organisational Behaviour", Himalaya Publishing House, 10th (Ed.)
4. Channa, N. A., Md.Shah, S. M. and Ghumro, N. H.(2019), "Uncovering the Link between Strategic Human Resource Management and Crisis Management: Mediating Role of Organizational Resilience", *Annals of Contemporary Developments in Management & HR,* Vol.1, No. 2, pp. 15-27, DOI:10.33166/ ACDMHR.2019.02.003.
5. Denyer, D. (2017), "Organizational Resilience: A summary of academic evidence, business insights and new thinking", *BSI and Cranfield School of Management*, pp. 8-25.

6. Douglas, S. (2021), “Building Organizational Resilience through Human Capital Management Strategy. *Development and Learning in Organizations”*, pp.1-5, https://doi.org/10.1108/DLO-08-2020-0180.
7. Ekanayake, H. L. and Gamage, P. N. (2018), “The Effect of Emotional Resilience on Job Performance of Executives in Selected Private Sector Organizations in Sri Lanka”, *Kelaniya Journal of Human Resource Management*, Vol. 13, No. 2, pp. 23-36, DOI: http://doi.org/10.4038/kjhrm.v13i2.56.
8. Fottler, M. (2002), “Strategic Human Resource Management”, In: Fried B and Johnson J (Eds.) Health Administration Press, 185-196.
9. Kumar, P. S. and Das, V. T. (2022), “Effectiveness of Employee Resilience Among Information Technology Sector Employees: An Empirical Study”, *EPRA International Journal of Economics, Business and Management Studies,* Vol. 9, No. 2, pp. 62-68.
10. Lengnick-Hall, C. A. (2011), “Beyond bouncing back: the concept of organizational resilience”, Presented at the Academy of Management Organization and Management Theory Division Seattle, Washington, 1-6.
11. Lengnick-Hall,C.A., Beck, T.E. and Lengnick-Hall, M.L. (2011), “Developing a capacity for organizational resilience through strategic human resources management”, *Human Resource Management Review*, Vol. 21, pp. 243-255.
12. McManus, S. (2008), “A facilitated process for improving organizational resilience”, *Natural Hazards Review,* Vol.9, No. (2), pp. 81-90, https://doi.org/10.1061/(ASCE)1527-6988(2008)9:2(81).
13. McManus, S., Seville, E. and Vargo, J. (2007), “Resilience management: A framework for Assessing and improving the resilience of organizations”, Retrieved from: https://ir.canterbury.ac.nz/handle /10092/9488.
14. Oparanma,A.O. and Ulunma,E. P. (2019), “Organizational Resilience and Corporate Performance of Deposit Money Bank in Port Harcourt”, *Nigeria International Journal of Business and Management Future*, Vol. 3, No. 2, pp. 1-12.
15. Schuler, R. and Jackson, S. (1987), “Linking competitive strategies with human resource management practices”, *Academy of Management Perspectives*, Vol. 1, No. 3, pp. 207-219, https://doi.org/10.5465/ame.1987.4275740.
16. Teece, D.J. (2010),” Explicating dynamic capabilities: the nature and micro foundations of sustainable enterprise performance”, *Strategic Management Journal,* Vol. 28, No. 13, pp. 1319-1350.
17. Walker, B.H., Carpenter, S.R., and Pritchard, L. (2002), “Resilience management in social-ecological systems: a working hypothesis for a participatory approach”. *Conservation Ecology,* Vol. 6, No. 14, Online: http://www.consecol.org/vol6/iss1/art14/. Downloaded 16.07.07.

WEBSITES

18. Human Capital Management retrieved from https:// www.bamboohr.com/resources/hr- glossary/human capital management-hcm, Viewed on 27th March 2023.
19. Human Capital Management retrieved from https://www.gartner.com/en/information- technology/ glossary/human capital management-hcm. Viewed on 27th March 2023.

ADDRESSING CLIMATE RISKS IN BANGLADESH'S FINANCIAL SYSTEM: EVALUATING THE GREEN FINANCING INITIATIVES OF BANGLADESH BANK

Md. SERAJUL ISLAM
ASST. PROFESSOR
DEPARTMENT OF BUSINESS ADMINISTRATION
CHATTOGRAM CANTONMENT PUBLIC COLLEGE
BAIZID BOSTAMI - 4210, CHATTOGRAM CANTONMENT, CHATTOGRAM, BANGLADESH

ABSTRACT

This paper examines the green financing initiatives undertaken by Bangladesh Bank, the central bank and financial regulator of Bangladesh. Bangladesh is highly vulnerable to climate change due to its geographical location and population density. The paper highlights the need to address climate risks in the financial sector and emphasizes the potential long-term impacts of climate change on the economy. The study explores the various green financing initiatives implemented by Bangladesh Bank, starting from the issuance of Environmental Risk Management guidelines in 2011 to the establishment of the Sustainable Finance Policy in 2020. These initiatives aim to promote sustainable financing practices, incentivize investments in climate-resilient projects, and support the transition to a low-carbon economy. Limited access to finance, particularly for smaller projects and rural areas, remains a challenge. The study also reviews empirical studies from developed countries on the effectiveness of green financing in addressing climate change. The findings indicate mixed results, with some studies showing a reduction in carbon emissions and shifts in lending practices towards low-carbon industries, while others suggest limited impact on emissions reduction. Based on the analysis, the paper provides recommendations for strengthening green financing initiatives in Bangladesh.

KEYWORDS

Bangladesh bank, climate risks, green financing, sustainable financing, climate-smart financial policies.

JEL CODES

Q54, G28, O44, G21, Q56.

INTRODUCTION

Climate change poses significant threats to financial systems worldwide. In 2015, Mark Carney, former Governor of the Bank of England, highlighted three channels through which climate change shocks can impact financial stability (Carney, 2015). In recent years, central banks and financial regulators have recognized the need to address climate risks and incorporate them into their policy frameworks (Demekas & Grippa, 2021). This recognition stems from the realization that climate change can have widespread and long-lasting effects on the economy and the financial sector (Abdullah et al., 2022).

Bangladesh, a low-lying delta country with a high population density, is particularly vulnerable to climate change. Rising sea levels, frequent cyclones, and erratic rainfall patterns pose significant risks to its agricultural sector and overall economic stability (The World Bank, 2016). These challenges also extend to neighboring countries such as India, Myanmar, Nepal, Pakistan, Thailand, the Philippines, and Vietnam, which face similar climate risks. The Intergovernmental Panel on Climate Change stresses that uncontrolled urbanization and climate-induced migration aggravate the climate change threat in Bangladesh (Hasan & Macdonald, 2021).

Despite impressive economic growth, Bangladesh remains exposed to the impacts of climate change. The COVID-19 pandemic further highlighted the vulnerability of the economy, but the country is now on a path to recovery (The Ministry of Finance, 2021). Bangladesh aspires to achieve middle-income country status, necessitating careful environmental management amidst rapid industrialization and development.

The economic losses stemming from climate risks in Bangladesh and neighboring countries have been substantial. Over the past two decades, Bangladesh has experienced significant financial losses equivalent to 37% of its GDP per unit, mirroring similar trends in neighboring countries (Global Climate Risk Index, 2021). The need for climate change mitigation and adaptation is reflected in the estimated infrastructure gap of USD 26.2 trillion in developing Asia from 2016 to 2030, with a significant portion earmarked for climate-related projects (Ra & Li, 2018).

LITERATURE REVIEW

Bangladesh, situated in a low-lying delta with a significant portion of its land below sea level, is one of the most densely populated countries in the world (The World Bank, 2016). This geographical vulnerability makes Bangladesh highly susceptible to the consequences of climate change. The country experiences a range of climate risks, including rising sea levels, extreme weather events such as cyclones and floods, and changing rainfall patterns. These hazards pose significant challenges to Bangladesh's agricultural sector, which plays a crucial role in the country's economy and supports the livelihoods of millions of people. Moreover, the population density exacerbates the impact of climate risks on human well-being and socio-economic systems (Eckstein et al., 2021).

According to the "Long-Term Climate Risk Index," which ranks countries based on their exposure and vulnerability to climate-related hazards, Bangladesh ranks seventh globally (Eckstein et al., 2021). Over the past two decades, the country has witnessed numerous climate-related events, including cyclones, floods, and storm surges, which have resulted in loss of lives, displacement of communities, and extensive damage to infrastructure and ecosystems. These events not only have immediate humanitarian consequences but also have long-term economic implications for the country and its neighbors (Chowdhury et al., 2022).

Neighboring countries, including India, Myanmar, Nepal, Pakistan, Thailand, the Philippines, and Vietnam, also face similar climate risks due to their geographical proximity and shared vulnerability. Climate change poses additional challenges for these countries, including agricultural disruptions, water scarcity, increased disease prevalence, and the risk of climate-induced migration. The Intergovernmental Panel on Climate Change (IPCC) identifies uncontrolled urbanization and climate-induced migration as key factors contributing to the climate change threat in Bangladesh and the region (Hasan & Macdonald, 2021).

Efforts to address climate risks in these countries require collective action, information sharing, and the implementation of adaptive measures to mitigate the impacts of climate change. As a result, central banks and financial regulators, such as Bangladesh Bank, are increasingly recognizing the need to incorporate climate risks into their policy frameworks and support green financing initiatives to promote sustainable development and enhance resilience to climate change (Chowdhury et al., 2023).

Despite impressive economic growth, Bangladesh remains vulnerable to the impacts of climate change. The COVID-19 pandemic further highlighted the country's economic vulnerabilities, leading to a contraction in various sectors, including manufacturing, agriculture, and services. However, Bangladesh is now on the path to recovery and is expected to improve rapidly (The Ministry of Finance, 2021).

Bangladesh has set ambitious goals to achieve middle-income country status and accelerate its socio-economic development. This requires significant social, economic, and technological transformations, driven by investments in infrastructure, industry, and human capital. However, rapid industrialization and development can contribute to environmental degradation and exacerbate the impacts of climate change (Chowdhury, 2022).

Climate change has already caused significant economic losses in Bangladesh and other vulnerable countries. Over the past two decades, Bangladesh has experienced substantial financial losses equivalent to 37% of its GDP per unit, primarily attributed to climate-related events (Global Climate Risk Index, 2021). The impacts of climate change, including crop failures, infrastructure damage, and disruptions to supply chains, have direct implications for the country's economic stability and development prospects.

Climate risks not only impose direct costs on countries but also create an infrastructure gap in developing Asia. A study estimated that between 2016 and 2030, there will be an infrastructure investment gap of USD 26.2 trillion in developing Asia, of which a significant portion will be required for climate change mitigation and adaptation (Ra & Li, 2018). Bridging this infrastructure gap and building climate resilience will require substantial investments in green infrastructure, renewable energy, climate-smart agriculture, and resilient urban planning.

In 2015, Bangladesh Bank renamed its Green Banking and CSR unit as the Sustainable Finance Department to align with the global focus on sustainability and social inclusion. In December 2020, the department issued a comprehensive Sustainable Finance Policy, aligned with the United Nations Sustainable Development Goals (SDGs) and other national and international strategies. This policy has guided banks and financial institutions in addressing environmental, social, and governance (ESG) issues in their portfolios and credit management. As a result, all banks and financial institutions have established their Sustainable Finance Units (Chowdhury and Humaira, 2023).

The government of Bangladesh, along with other stakeholders such as the Ministry of Finance, Ministry of Environment, Forest, and Climate Change, Ministry of Commerce, and Ministry of Industries, plays an active role in promoting sustainable finance. The stakeholders provide macro-level suggestions and support the Sustainable Finance Department in developing policies and guidelines. Stakeholders include the Chittagong Stock Exchange, Dhaka Stock Exchange, Bangladesh Association of Banks, Sustainable and Renewable Energy Development Authority, Bangladesh Institute of Bank Management, and the National Security Board and Security Exchange Commission (Chowdhury, 2023).

Ehlers et al. (2020) found no clear evidence that issuing green bonds leads to a reduction in carbon intensities at the firm level over time. Their findings indicated that the impact of green bonds depends on the types of firms involved. While financial firms, particularly banks, are the least carbon-intensive, their investments are heavily concentrated in carbon-intensive industries. This suggests that although green bonds are being issued, the investments of financial firms may not necessarily contribute to carbon reduction efforts.

Another study by Delis et al. (2018) examined the lending practices of banks towards carbon-intensive, particularly fossil fuel, firms. Their findings showed that banks do not significantly increase loan spreads for fossil fuel firms. However, they found evidence that after the signing of the 2015 Paris Agreement, banks started raising loan spreads for fossil fuel firms that are highly vulnerable to climate policy risks. This suggests that the awareness of climate-related risks and international climate change initiatives may influence lending practices towards carbon-intensive industries.

Furthermore, Reghezza et al. (2021) documented a decrease in loan shares to polluting firms by European banks after the signing of the 2015 Paris Agreement. This indicates a shift in the banks' lending practices to reduce exposure to polluting industries.

In terms of sustainable investing, Elmalt et al. (2021) found weak evidence that higher environmental, social, and governance (ESG) investments lead to a reduction in emissions growth for investor-owned firms. Their results suggest that ESG investment does not necessarily translate into lower carbon footprints for companies. Bolton and Kacperczyk (2020) proposed that increasing the cost of equity for polluting firms could be an alternative to carbon pricing for environmentally-minded investors. De Hass et al. (2021) examined the impact of credit constraints on green investments by firms. They found that credit-constrained firms are less likely to engage in green investment, but better green management reduces emissions. This suggests that providing easier access to credit and improving green management practices can facilitate green investments and reduce emissions.

Several central banks in advanced countries have conducted stress tests to assess the impact of climate change on their financial systems. The findings from these stress tests reveal the exposure of banks and insurers to physical and transition risks related to climate change (Chowdhury and Khan, 2023).

IMPORTANCE OF THE STUDY

The importance of this study lies in evaluating the green financing initiatives implemented by Bangladesh Bank. It is crucial to assess the effectiveness of these initiatives in addressing climate risks and promoting sustainable development. Understanding the impact and challenges associated with green financing can inform policymakers, financial institutions, and stakeholders on how to further enhance and refine these initiatives. This study contributes to the existing literature on green finance in Bangladesh and provides insights for other developing countries facing similar challenges.

STATEMENT OF THE PROBLEM

The problem addressed in this study is the limited access to and effectiveness of green financing in Bangladesh. Despite the implementation of various initiatives by Bangladesh Bank, there are obstacles preventing the seamless integration of sustainable development practices into the financial sector. These obstacles include limited awareness among clients, insufficient incentives for financial institutions, and the need for stronger regulations. This study aims to identify and evaluate these challenges and provide recommendations for improving green financing practices.

OBJECTIVES OF THIS STUDY

The objectives of this study are as follows:

a) Assess the effectiveness of green financing initiatives implemented by Bangladesh Bank.
b) Identify and analyze the challenges associated with green financing in Bangladesh.
c) Evaluate the impact of green financing on addressing climate risks and promoting sustainable development.
d) Provide recommendations for enhancing the effectiveness and accessibility of green financing in Bangladesh.

DEVELOPMENT OF HYPOTHESES

The following hypotheses will be tested in this study:

H1: The green financing initiatives implemented by Bangladesh Bank have positively contributed to addressing climate risks and promoting sustainable development.

H2: The limited access to green financing in Bangladesh is primarily due to the lack of awareness and incentives among clients and financial institutions.

H3: Stronger regulations, incentives, and collaboration with international organizations can improve the effectiveness of green financing in Bangladesh.

RESEARCH METHODOLOGY

This study will employ a mixed-methods research approach. It will involve quantitative analysis of data collected from financial institutions and clients using surveys and interviews. Additionally, qualitative analysis will be conducted through a comprehensive review of existing literature and policy documents. The data will be analyzed using appropriate statistical methods and qualitative content analysis.

DISCUSSION

Bangladesh has made commendable progress in the field of green and sustainable financing, positioning itself in the "Advancing" sub-stage of the "Implementation" stage according to the Sustainable Banking and Finance Network (SBFN) Progression Matrix. This places it alongside Vietnam, while China and Indonesia are in the advanced "Consolidating" stage among Asian countries (SBFN, 2022). The success of Bangladesh's green financing policies and guidelines has been recognized globally in the Reserve Bank of India (RBI) Bulletin, indicating its positive impact and relevance in the region.

However, despite the impressive policies and frameworks in place, the banking sector in Bangladesh still faces risks and vulnerabilities. Challenges such as non-performing loans, inadequate credit information, poor governance, lengthy legal procedures, and financial scams persist (Khairunnessa, Vazquez-Brust, & Yakovleva, 2021). The COVID-19 pandemic has further exacerbated these challenges, impacting the financial system and the performance of green financing schemes. To address these issues, Bangladesh Bank needs to prioritize strategies for accelerating green growth and ensure effective implementation of sustainable finance measures.

One significant bottleneck in the system is the mobilization of funds by banks and financial institutions to potential investors. Intermediary organizations play a crucial role in connecting green projects with appropriate funding. Strengthening the coordination between intermediaries and Bangladesh Bank is essential to identify and mobilize green projects and ensure their proper utilization. The establishment of a Sustainable Financing Forum, involving government authorities, banks, financial institutions, intermediaries, and potential borrowers, could facilitate collaboration and knowledge sharing, leading to increased investment in green projects.

TABLE 1: GREEN FINANCE DISBURSEMENTS IN BANGLADESH

Year	Total Disbursements (BDT Billion)	Share of Total Bank Advances (%)**
2011	0.2	0.01
2012	0.72	0.03
2013	0.95	0.04
2014	1.28	0.05
2015	2.70	0.10
2016	15.64	0.57
2017	20.34	0.74
2018	22.28	0.81
2019	25.03	0.89
2020	33.4	1.19
2021	40.43	1.45
2022	52.27	1.89

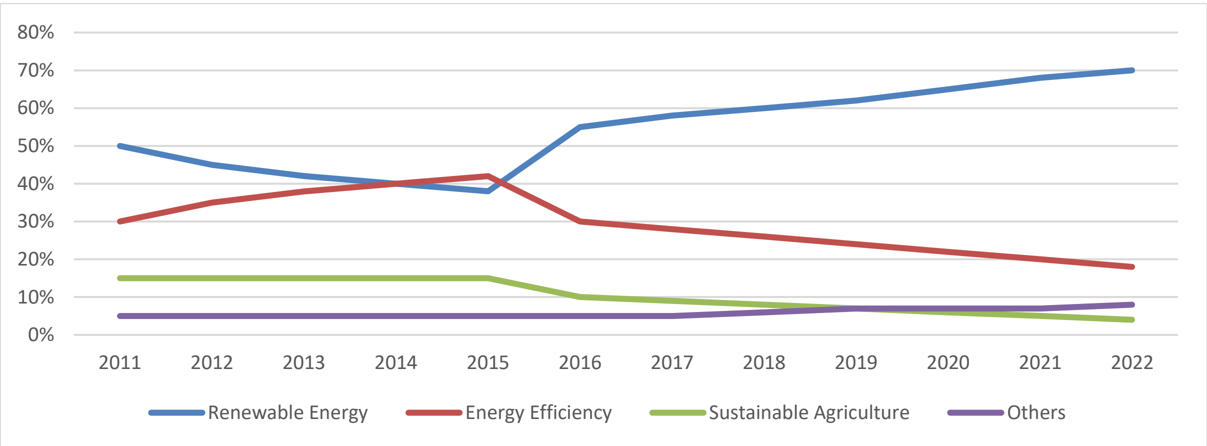
Source: Bangladesh Bank and Bangladesh Institute of Development Studies

The historical data presented in Table 1 illustrates a gradual yet significant growth in green finance disbursements in Bangladesh. Initially, in 2011, the disbursements were minimal, barely making an impact. However, as the years progressed, a remarkable shift occurred. By 2022, green finance had expanded nearly fourfold, accounting for almost 2% of total bank advances—a notable increase from its initial share of merely 0.01%. This upward trend signifies Bangladesh's increasing dedication to mitigating climate risks and fostering a greener economy.

It is important to acknowledge that this growth has not occurred without its challenges. While the share of green finance in total bank advances has been steadily rising, it still falls short of the recommended 5% benchmark. Moreover, there are concerns regarding limited access to finance, particularly for smaller projects and rural areas. Despite these obstacles, the consistent surge in disbursements indicates that Bangladesh is heading in the right direction, nurturing its green finance initiatives into a promising future.

To gain deeper insights into the efficacy of existing green financing measures and identify areas for improvement, it is beneficial to focus on sector-specific breakdowns and project distribution.

FIGURE 1: SECTOR-WISE BREAKDOWN OF GREEN FINANCE DISBURSEMENTS. SOURCE: BANGLADESH BANK AND BANGLADESH INSTITUTE OF DEVELOPMENT STUDIES



This analysis can offer a comprehensive understanding of how effective the current initiatives have been and highlight potential areas for enhancement. As Bangladesh continues its journey towards addressing climate change concerns, it is crucial to maximize the potential of green finance, ensuring it becomes a robust, inclusive mechanism that propels the nation towards a sustainable future. Figure 1 depicts a sector-wise breakdown of green finance disbursements in Bangladesh from 2011 to 2022. The data reveals significant trends in sector allocations over the years. The percentage of disbursements for renewable energy projects consistently increases, starting at 50% in 2011 and reaching a peak of 70% in 2022. This highlights a strong emphasis on renewable energy initiatives in the country. Energy efficiency projects also see steady growth, with disbursements ranging from 30% in 2011 to 18% in 2022. Sustainable agriculture projects maintain a relatively stable allocation of 15%, indicating consistent investment in this sector. The "Others" category, representing a variety of sectors, demonstrates consistent disbursements at 5%, albeit with slight increases to 6% in 2018 and 8% in 2022. This sector-wise breakdown offers valuable insights into the distribution of green finance and informs an analysis of the effectiveness and priorities in Bangladesh's green financing efforts (Ahmad et al., 2020)

TABLE 2: NUMBER AND AVERAGE LOAN SIZE OF GREEN PROJECTS FINANCED

Year	Number of Green Projects	Average Loan Size (BDT Million)
2011	12	16.67
2012	35	20.57
2013	51	18.63
2014	72	17.78
2015	115	23.48
2016	287	54.41
2017	352	57.76
2018	405	55.05
2019	451	55.49
2020	528	63.22
2021	615	65.67
2022	735	71.05

Source: Bangladesh Bank and Bangladesh Institute of Development Studies

Table 2 provides a comprehensive overview of the number and average loan size of green projects financed in Bangladesh from 2011 to 2022. The data reveals significant trends and patterns in green project financing over the years. The number of green projects shows a remarkable increase, starting at 12 in 2011 and steadily rising to 735 in 2022. This indicates a growing interest and commitment towards green initiatives in the country. Additionally, the average loan size for these projects also displays a consistent upward trend. Beginning at BDT 16.67 million in 2011, the average loan size gradually increases to BDT 71.05 million in 2022. This suggests a willingness to provide substantial financial support for larger-scale green projects. These findings reflect a positive evolution in the financing landscape, demonstrating a growing capacity to fund and support environment-friendly initiatives in Bangladesh. The information presented in this table serves as a valuable indicator of the progress and effectiveness of green finance efforts in the country (Bikker and Spierdijk, 2008).

Incentivizing banks and financial institutions to support green projects, specific measures should be put in place. Foreign banks operating in Bangladesh, such as HSBC and Standard Chartered Bank, follow stricter global policies and guidelines, making their financing activities more robust and aligned with the targets set by Bangladesh Bank. Marketing these incentives effectively to potential borrowers is crucial to attract more investment in green projects and foster sustainable development.

The development of the capital market for green bonds in Bangladesh is still in its early stages. While green bonds hold promise, research suggests that other factors, such as firm-level green ratings, may have a more significant impact on transitioning to a low-carbon economy. Therefore, attention should be given to identifying climate-resilient infrastructure projects and exploring climate finance initiatives that can contribute to enhancing the country's sustainable development goals.

To strengthen its international connections, Bangladesh Bank should study standardized institutional frameworks and practices implemented by other countries and explore partnerships and associations that can enhance the country's sustainable finance framework. Learning from global best practices and collaborating with international institutions can provide valuable insights and guidance for further enhancing green financing initiatives in Bangladesh.

It is worth considering the integration of digital currency and the adoption of polymer banknotes, as done by other central banks, to contribute to environmental sustainability and ensure efficient monitoring of financial systems. These technological advancements can help reduce the environmental footprint associated with traditional currency production and circulation, while also enhancing the efficiency and transparency of financial transactions (Bose et al., 2012).

While Bangladesh has made commendable progress in the field of green financing, there are challenges and areas for improvement. Strengthening coordination, incentivizing financial institutions, developing the capital market for green bonds, and studying global best practices can further enhance Bangladesh Bank's efforts in promoting sustainable finance and addressing climate risks. By prioritizing these strategies and capitalizing on opportunities for innovation and collaboration, Bangladesh can continue driving its transition towards a low-carbon, climate-resilient economy.

POLICY FORMULATIONS

Regulatory Authority: Strengthen regulations for green financing and establish clear criteria for identifying and categorizing green projects. Implement reporting requirements and auditing mechanisms to monitor compliance.

Financial Institutions: Introduce incentives like preferential interest rates and tax benefits for green loans and investments. Enhance capacity building programs for staff and develop specialized loan products for different sectors.

Clients: Raise awareness through targeted marketing campaigns, financial literacy programs, and workshops. Provide support for clients in preparing and implementing green project proposals.

Tax Authority: Offer tax incentives and establish clear guidelines for tax deductions or favorable treatment for green investments.

Social Organizations and NGOs: Collaborate to raise awareness, monitor policy implementation, and mobilize funding for community-led green projects.

Other Relevant Stakeholders: Foster collaboration between industry associations, research institutions, academia, and international organizations. Develop public-private partnerships and monitor policy effectiveness through regular evaluation.

CONCLUSION

In recent years, central banks across the globe have recognized the importance of addressing climate change and its potential impact on the stability of the banking sector. The "greening" of monetary policy, which allows central banks to prioritize green firms and sustainability, is a crucial step towards achieving sustainable economic growth. This chapter has provided a comprehensive analysis of the green financing policies implemented by Bangladesh Bank; the central bank of a country highly vulnerable to climate change. Several key takeaways emerge from this analysis. Firstly, the growing concern of non-performing loans and poor governance indicates the potential unpreparedness of Bangladeshi banks and insurers in dealing with the financial risks associated with climate change. To assess the banks' vulnerability to climate-related risks, conducting climate stress tests can provide valuable insights and help prepare for potential financial fallout. Secondly, while Bangladesh Bank has established comprehensive green financing policies, their effectiveness depends on banks and financial institutions effectively mobilizing funds for green projects. Intermediary organizations play a crucial role in connecting green projects with appropriate funding sources. Collaborating with organizations such as IDCOL and NGOs can facilitate the financing of green projects and ensure their proper implementation. Thirdly, the direct and indirect benefits of green loans are evident. Local banks can learn from foreign banks about incentivizing green loans in the most efficient manner. By following the practices of foreign banks, local banks can effectively promote and support green initiatives in the country. Lastly, it is essential for Bangladesh Bank to align its green policies with a focus on strengthening climate preparedness, adaptation, and mitigation activities. Initiatives such as climate finance should be given careful consideration to ensure adequate funding and support for climate-resilient projects.

LIMITATIONS

There are certain limitations to this study. Firstly, the sample size for surveys and interviews may be limited, which may affect the generalization of findings. Secondly, the study may face challenges in accessing accurate and comprehensive data on the impact of green financing initiatives. Lastly, time and resource constraints may limit the depth of analysis in some areas.

SCOPE FOR FUTURE RESEARCH

This study opens up several avenues for future research. Further research can explore the long-term impacts of green financing on climate resilience and sustainable development in Bangladesh. Additionally, more in-depth investigations can be conducted to identify specific barriers and facilitators of green financing implementation. Comparative studies across different countries can also provide valuable insights into best practices and lessons learned in promoting green finance.

REFERENCES

1. Abdullah, M.N., Chowdhury, E.K. & Tooheen, R.B. (2022). Determinants of capital structure in banking sector: a Bangladesh perspective. SN Bus Econ. 2, (190). https://doi.org/10.1007/s43546-022-00370-8
2. ADBI Working Paper 814, 30. Retrieved from Asian Development Bank Institute.
3. Ahmad, N., Naveed, A., Ahmad, S., & Butt, I. (2020). Banking sector performance, profitability, and efficiency: a citation-based systematic literature review. Journal of Economic Surveys, 34(1), 185-218.
4. Antara, N. F. (2021, June 03). Budget FY22: Around Tk25,125cr budget proposed to tackle climate change. Dhaka, Dhaka, Bangladesh. Retrieved from https://archive.dhakatribune.com/business/economy/2021/06/03/budget-fy22-around- tk25-125cr-budget-proposed-to-tackle-climate-change
5. Bangladesh Bank (BB). (2020). (BB) Annual Report 2019-2020. Dhaka: Bangladesh Bank. Retrieved from https://www.bb.org.bd/pub/annual/anreport/ar1920/full_2019_2020.pdf

6. Bangladesh Bank Circulars. (2022, May 23). Mediaroom Circulars. Retrieved from Bangladesh Bank: https://www.bb.org.bd/en/ index.php/mediaroom/circular
7. Bangladesh Bank. (2011, January 01). Environmental Risk Management (ERM) Guidelines for Banks and Financial Institutions in Bangladesh. ERM Regulation Guideline, 43. Dhaka, Dhaka, Bangladesh: Bangladesh Bank. Retrieved from https://www.bb.org.bd/aboutus/regulationguideline/jan302011erm.pdf
8. Bangladesh Bank. (2020-2021). Sustainable and Inclusive Banking - Chapter 6. In B. Bank, Annual Report (p. 18). Dhaka: Bangladesh Bank. Retrieved from file:///C:/Users/Shehtaz/Desktop/Book/full_2020_2021.pdf
9. Bank of England. (2022, April 25). Climate Change. Retrieved from Bank of England: https://www.bankofengland.co.uk/climate-change
10. Banque de France (2021) A first assessment of financial risks stemming from climate change: The main results of the 2020 climate pilot exercise. No. 122-2021.
11. Berlin: Germanwatch e.V. Retrieved from www.germanwatch.org/en/cr
12. Bikker, J. A., & Spierdijk, L. (2008). How banking competition changed over time. Discussion Paper Series/Tjalling C. Koopmans Research Institute, 8(04).
13. Bolton, P, and M T Kacperczyk (2021), "Global pricing of carbon-transition risk", NBER Working Paper No. 28510. https://www.nber.org/papers/w28510
14. Bose, N., Capasso, S., & Andreas Wurm, M. (2012). The impact of banking development on the size of shadow economies. Journal of Economic Studies, 39(6), 620-638.
15. Carney, M. (2015). Breaking the tragedy of horizon–climate change and financial stability. Speech at Lloyd's of London.
16. Carney, M. (2015, September 29). Breaking the tragedy of the horizon - climate change and financial stability - speech by Mark Carney. (L. o. London, Interviewer) Retrieved from https://www.bankofengland.co.uk/-/media/boe/files/speech/2015/breaking-the- tragedy-of-the-horizon-climate-change-and-financial- stability.pdf?la=en&hash=7C67E785651862457D99511147C7424FF5EA0C1A
17. Chowdhury E.K, & Khan I.I. (2023). Reactions of Global Stock Markets to the Russia–Ukraine War: An Empirical Evidence, Asia-Pacific Financial Markets, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1007/s10690-023-09429-4
18. Chowdhury E.K, Khan I.I, Dhar B.K. (2023). Strategy for implementing blockchain technology in accounting: Perspectives of stakeholders in a developing nation. Business Strategy & Development, 6 (3), 477-490. https://doi.org/10.1002/bsd2.256
19. Chowdhury, E. K. (2023). Do weather patterns effect investment decisions in the stock market? A South Asian perspective, Journal of Asset Management, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1057/s41260-023-00334-z
20. Chowdhury, E. K. (2023). Is the Application of Blockchain Technology in Accounting Feasible? A Developing Nation Perspective. In Abedin, M.K., Hajek, P. (eds.) Cyber Security and Business Intelligence Innovations and Machine Learning for Cyber Risk Management (pp. 46-64). Routledge. https://doi.org/10.4324 /9781003285854
21. Chowdhury, E. K., & Humaira, U. (2023). The Russia–Ukraine conflict and investor psychology in financial markets. Economic Affairs, 43(3), 388-405. https:// doi.org/10.1111/ecaf.12596
22. Chowdhury, E. K., & Humaira, U. Transformation of investor attitude towards financial markets: A perspective on the Russia–Ukraine conflict. International Social Science Journal. 1–23. https://doi.org/10.1111/issj.12470
23. Chowdhury, E. K., Dhar, B. K., Thanakijsombat, T., & Stasi, A. (2022). Strategies to determine the determinants of financial performance of conventional and Islamic commercial banks: Evidence from Bangladesh. Business Strategy & Development, 1–19. https://doi.org/10.1002/bsd2.207
24. Delis, M., Greiff, K., & Ongena, S. (2018, May 15). Being Stranded on the Carbon Bubble? Climate Policy Risk and the Pricing of Bank Loans. SSRN, 65. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3178099
25. Demekas, M. G., & Grippa, P. (2021, December 17). Financial Regulation, Climate Change, and the Transition to a Low-Carbon Economy: A Survey of the Issues.
26. Eckstein, D., Künzel, V., & Schäfer, L. (2021). GLOBAL CLIMATE RISK INDEX 2021.
27. Ehlers, T., Mojon, B., & Packer, F. (2020). Green bonds and carbon emissions: exploring the case for a rating system at the firm level. Basel: BIS. Retrieved from https://www.bis.org/publ/qtrpdf/r_qt2009c.pdf
28. Elmalt, D., Igan, D., & Kirti, D. (2021). Limits to Private Climate Change Mitigation. London: Centre for Economic Policy Research. Retrieved from https://cepr.org/active/publications/discussion_papers/dp.php?dpno=16061#
29. Global Climate Risk Index. (2021). Retrieved from https://www.cfainstitute.org/en/programs/climate-risk-valuation-investing?
30. Hasan, M., & Macdonald, G. (2021, September 13). How Climate Change Deepens Bangladesh's Fragility. Analysis and Commentary. 2301 Constitution Avenue NW, Washington D.C., United States of America: United States Institute of Peace. Retrieved from https://www.usip.org/publications/2021/09/how-climate-change-deepens- bangladeshs-fragility
31. Hasan, S., & Macdonald, L. (2021). Climate outlook for South Asia: A review. Journal of South Asian Development, 16(3), 292-314.
32. Khairunnessa, F., Vazquez-Brust, D., & Yakovleva, N. (2021). A Review of the Recent Developments of Green Banking. Basel: MDPI. doi:https://doi.org/ 10.3390/
33. Ra, K., & Li, J. (2018). Financing sustainable development in Asia and the Pacific: Addressing infrastructure gaps for a resilient future. ADB Briefs No. 87, Asian Development Bank.
34. Reghezza, A., Altunbas, Y., Marques-Ibanez, D., d'Acr, C. R., & Spaggiari, M. (2021). Do banks fuel climate change? Frankfurt: European Central Bank. Retrieved from https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp2550~24c25d5791.en.pdf
35. SBFN. (2022). Bangladesh Country Progress Report - Supplement to the 2021 Global Progress Report of the Sustainable Banking and Finance Network. Washington D.C: IFC and SBFN. Retrieved from https://sbfnetwork.org/wp- content/uploads/pdfs/2021_Global_Progress_Report_Downloads/2021_Country_Progres s_Report_Bangladesh.pdf
36. Sustainable Finance Department (SFD). (2022, May 24). Sustainable Finance Department. Retrieved from Bangladesh Bank : https://www.bb.org.bd/en/index .php/about/deptdtl/61#:~:text=Sustainable%20Finance%2 0Department%20was%20established,FIs%20through%20efficient%20and%20effective
37. The Ministry of Finance. (2021). Chapter One: Macroeconomic Situation. In F. D. Finance, Bangladesh Economic Review 2021 (p. 10). Dhaka, Bangladesh: FInance Division. Retrieved from https://mof.portal.gov.bd/sites/default/files/files/mof.portal.gov.bd/page/f2d8fabb_29c1_ 423a_9d37_cdb500260002/ 10.%20Chapter-01%20Eng%20Eng-21.pdf
38. The World Bank. (2016). Bangladesh - Climate Change and Development in Bangladesh. Retrieved from https://www.worldbank.org/en/news/video /2017/06/07/climate-change-impacts-in-bangladesh#:~:text=Bangladesh%20is%20among%20the%20most,the y%20have%20found%20innovative%20solutions.
39. The World Bank. (2016, October 9). Bangladesh: Building Resilience to Climate Change. Retrieved from The World Bank: https://www.worldbank.org/en /results/2016/10/07/bangladesh-building-resilience-to- climate-change.print.
40. UNEP FI. (2020). UNEP FI Annual Overview 2020. Geneva: United Nations Environmental Programme Finance Initiative. Retrieved from https://www.unepfi .org/wordpress/wp-content/uploads/2021/07/2020-Annual- Overview.pdf
41. Volz, U. (2018, March). Fostering Green Finance for Sustainable Development in Asia.

REQUEST FOR FEEDBACK

Dear Readers

At the very outset, International Journal of Research in Commerce & Management (IJRCM) acknowledges & appreciates your efforts in showing interest in our present issue under your kind perusal.

I would like to request you to supply your critical comments and suggestions about the material published in this issue, as well as on the journal as a whole, on our e-mail **infoijrcm@gmail.com** for further improvements in the interest of research.

If you have any queries, please feel free to contact us on our e-mail **infoijrcm@gmail.com**.

I am sure that your feedback and deliberations would make future issues better – a result of our joint effort.

Looking forward to an appropriate consideration.

With sincere regards

Thanking you profoundly

Academically yours

Sd/-
Co-ordinator

DISCLAIMER

ABOUT THE JOURNAL

In this age of Commerce, Economics, Computer, I.T. & Management and cut throat competition, a group of intellectuals felt the need to have some platform, where young and budding managers and academicians could express their views and discuss the problems among their peers. This journal was conceived with this noble intention in view. This journal has been introduced to give an opportunity for expressing refined and innovative ideas in this field. It is our humble endeavour to provide a springboard to the upcoming specialists and give a chance to know about the latest in the sphere of research and knowledge. We have taken a small step and we hope that with the active co-operation of like-minded scholars, we shall be able to serve the society with our humble efforts.

Our Other Journals