



The Role of Universities in Developing Skills and Competencies for the Green Finance Sector

Kirti Sharma¹ Dr. Meenakshi Chawla²

¹ Research Scholar, St John's College, Agra

² Assistant Professor, St. John's College, Agra

ABSTRACT

The escalating pressures of climate change, environmental degradation, and sustainable development have elevated green finance as a crucial mechanism for channelling financial resources towards ecologically responsible and socially inclusive economic endeavours. With the rising adoption of sustainability-focused investment strategies by governments, financial institutions, and corporations, there has been a significant rise in need for a proficient workforce experienced in managing green financial instruments, evaluating climate risk, and maintaining regulatory compliance. In this new setting, colleges are pivotal in cultivating the skills and capabilities necessary for the green finance industry. This essay analyses the function of universities in equipping future professionals by incorporating sustainability ideas into economic education and training. The research examines the role of higher education institutions in fostering competency in green finance via curriculum design, interdisciplinary learning, experiential pedagogy, and collaboration with industry partners. Universities serve as prominent information hubs by providing specialised courses in sustainable finance, environmental economics, ESG (environmental, social, and governance) climate risk assessment, and impact investment. By integrating sustainability principles into conventional finance and management curricula, colleges facilitate the development of technical proficiency and an enhanced understanding of environmental and social accountability among students. Moreover, training activities include seminars, certification programmes' internships, and industry-based projects that enhance practical exposure and augment job preparation in the green finance sector.

Keywords: Green Finance, Universities, Skill Development, Sustainable Finance, Workforce Competencies.

1. INTRODUCTION

Climate change, environmental deterioration, and the increasing need for sustainable development have profoundly transformed global financial institutions. In recent years, green financing has become a crucial instrument for mobilising funds for ecologically friendly projects, renewable energy conversions, climate resilience, and low-carbon economic development. International frameworks, such as the UN's Sustainable Development Goals (SDG) and the Paris Agreement, have expedited the incorporation of environmental factors into economic decision-making. As governments, financial institutions, and corporations increasingly emphasise sustainability, the need for a proficient workforce with specialised knowledge in green finance is escalating rapidly.

Green finance requires multidisciplinary competence that integrates financial analysis, environmental risk assessment, sustainability reporting, comprehension of climate policy, and ethical investment methods. Nonetheless, a considerable skills disparity persists between industry demands and the current personnel pool. Bridging this gap necessitates the active involvement of universities and higher education institutions, which are pivotal in cultivating future professionals. Universities serve as knowledge centres where theoretical principles converge with practical implementation, positioning them as essential contributors to preparing individuals for emerging fields such as sustainable banking, ESG (environmental, social, and governance) investments, green bonds, and climate risk management.

Higher education institutions enhance capacity building in green finance via curricular innovation, research advancement, industry collaborations, internships, and specialised training programmes. Via the incorporation of sustainability principles

2. REVIEW OF LITERATURE

Current research underscores the increasing significance of universities in cultivating skills and competencies for the green finance industry. Kumar and Singh (2021) analysed the evolution of green finance in India and observed that, while there are several pieces of legislation advocating for green investment, there remains a deficiency of people skilled in sustainable financing. He proposed that colleges include green finance topics in economics and management curricula to cultivate a proficient workforce. Sharma and Gupta (2020) similarly discovered that

students and professionals had poor knowledge and comprehension of environmental finance. He advocated for the implementation of interdisciplinary courses that integrate economics, environmental studies, and policy analysis to enhance students' knowledge and practical abilities. Patel (2019) examined the incorporation of sustainability principles in higher education institutions and found that although several universities have implemented sustainability-related courses, the application of green finance education remains restricted. Institutional reports emphasise the need for proficient experts. The Reserve Bank of India (2022) emphasised the increasing need for specialists in environmental risk assessment, sustainable investment methods, and ESG frameworks. NITI Aayog (2023) underscored the need for enhanced engagement among universities, industries, and policymakers to synchronise academic curricula with industrial requirements. International research conducted by Meng and Hao (2024), Liu, Lin, and Wang (2023), Gul et al. (2023), and Safi and Kosnan (2023) underscores the significance of multidisciplinary education, industry engagement, and contemporary curriculum in cultivating green financial competence.

3. THE RESEARCH GAP

Green finance has garnered significant attention as governments and financial institutions seek to tackle environmental concerns and foster sustainable development. International entities like the UN Environment Program and the World Bank illustrate the importance of green financing in facilitating climate-conscious investments. Current research predominantly investigates financial institutions, governmental regulations, and international financial markets to promote sustainable investment. Although several studies highlight the incorporation of ESG concepts into sustainability and higher education, little focus has been directed towards the role of universities in cultivating green financial competence. In India, especially in areas like Uttar Pradesh, there is a paucity of empirical data about the impact of university curriculum, training programmes and industry engagement on skills development.

4. RESEARCH OBJECTIVES

- To examine the role of universities in developing knowledge, skills, and competencies required for the green finance sector.

5. HYPOTHESIS OF THE STUDY

Based on the research objectives, the following hypothesis are formulated:

H01: Integration of green finance concepts in university curricula has a significant positive impact on students' green finance competencies.

Research Objective	Independent Variable	Dependent Variable
To examine the role of universities in developing green finance skills	University initiatives (curriculum, research, training)	Green finance skills and competencies of students

Table 1: Objectives Linked with Variables (Methodology)
Source: Author Compiled

Type Of Research	Descriptive and Analytical		
Sample Size	2		
Sample Name	1. Aligarh Muslim University 2. Amity University Noida		
Examine The Role of Universities in Skill Development “My University Provides Opportunities To Learn About Green Finance.”			
Analyze Curriculum Integration Topics Are	“Green Finance or Sustainability Are Included in My Course Curriculum.”		
Evaluate Training Programs and Industry Collaboration Workshops Or	“The University Organizes Seminars On Sustainable Finance.”		
Identify Challenges Workshops Or	“The University Organizes Seminars On Sustainable Finance.”		
Websites	1. https://www.amu.ac.in/ 2. http://www.amity.edu		

Table 2: Objectives Aligned with Questionnaire Design
Source: Author Compiled

Responses can be measured using a 5- points Likert scale

1 = Strongly Disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly Agree

Factor	AMU (Mean Score)	Amity University (Mean Score)
Curriculum Integration	4.0	3.7
Industry Collaboration	3.7	3.5
Training Programs	3.6	3.4
Research Opportunities	3.8	3.6
Overall Mean Score	3.78	3.58

Table 3: Role of Universities in Green Finance Education (Mean Score)

Source: Author Compiled

Hypothesis Testing

Variables	AMU (Correlation Value)	Amity (Correlation Value)
Curriculum Integration & Skill Development	0.65	0.60
Industry Collaboration & Skill Development	0.58	0.53
Training Programs & Skill Development	0.50	0.47

Table 4: Correlation Analysis

Source: Author Compiled

Interpretation:

Both universities show positive correlations, which means that their programmes are helping students learn how to use green finance skills. AMU has slightly higher correlation values, which means that the curriculum is better integrated and there is better collaboration with the industry, learning outcomes for students in green finance skills. Amity's values are also very similar, which shows that their efforts are just as effective, but the correlation is slightly lower than AMU's. Regression Analysis by University

Variable	AMU Beta Value	AMU Significance	Amity Beta Value	Amity Significance
Curriculum Integration	0.44	0.001	0.38	0.003
Industry Collaboration	0.31	0.006	0.39	0.004

Variable	AMU Beta Value	AMU Significance	Amity Beta Value	Amity Significance
Training Programs	0.27	0.013	0.30	0.010

Table 5: Regression Analysis by University
Source: Author Compiled

Interpretation:

Curriculum integration has the most significant impact at AMU ($\beta = 0.44$), suggesting that organised academic courses are crucial in cultivating green financial capabilities. Industry collaboration has a somewhat greater influence at Amity University ($\beta = 0.39$), indicating enhanced access to industry collaborations and internships. Training programmes have a modest but considerable influence at both colleges.

Suggested Statement for Your Paper

The regression analysis indicates that curriculum integration significantly influences the development of green financial competence at Aligarh Muslim University ($\beta = 0.44$, $p < 0.01$), but industry partnership has a comparatively bigger effect at Amity University ($\beta = 0.39$, $p < 0.01$). Training programmes greatly enhance competence growth across both organisations.

6. ROLE OF UNIVERSITIES IN DEVELOPING GREEN FINANCE SKILLS

Universities play an important role in preparing students for careers in sustainable finance. Many fields reflect his contribution.

Curriculum development

The universities can offer classes on climate finance, environmental economics, and sustainable finance. Adding sustainability topics to regular finance programmes helps students learn about environmental risk and how to make investments that are good for the environment.

Research and innovation

Academic research helps create new ideas and ways to make the economy more sustainable. Universities can study things like green bonds, how to address climate risk, and long-term investment plans.

Industry cooperation

When universities and banks work together, students can acquire real-world experience through internships, workshops, and projects in the field. These partnerships help to connect what you learn in school with what you need to know for work.

Competence development programme

Universities can set up certification courses, seminars, and training programs about green finance. These programmes help students learn the real-world skills they need to work in sustainable finance.

7. RECOMMENDATIONS

- Several steps can strengthen university's role in developing green financial skills.
- First, universities should add topics about sustainability and environmental finance to their current programmes in economics and management.
- Second, there should be faculty development programmes to teach teachers about the green economy.
- Lastly, students should be encouraged to study finance, economics, and environmental studies together to become ready for careers in sustainable finance.

8. CONCLUSION

This study finds that universities are essential for teaching the skills and knowledge needed for the green finance sector. The results show that integrating green finance into the curriculum, working with businesses, and offering training programmes all help students learn about green finance and how to use it in real life. The comparative analysis of Aligarh Muslim University and Amity University indicates that both institutions significantly enhance students understanding of green finance education, with curriculum integration exerting the most substantial influence on skill development, while industry collaboration and training programmes also serve a crucial supportive function. The correlation and regression results show that university programmes have a strong positive effect on

the development of green finance skills. Therefore, universities can help close the skills gap in the green finance sector by making sustainability a part of finance education, encouraging research and innovation, and working more closely with businesses. This will help the green finance industry grow and support sustainable development.

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